RoHS COMPLIANT 2002/95/EC

AMC
YOUR SECURITY CHOICE

CONTROL UNITS

R Series

TECHNICIAN & USER MANUAL

- Versione 4.0 -

1. INTRODUCTION

The R serie control unit is composed of two elements: a board and a receiver, the latter contained in a small LCD keypad. To the basic configuration you can connect two radio receivers (positioned as needed in different places), which can handle 32 radio devices, for a total of 96 devices, addressable to 48 inputs.
Inputs are freely assignable to 2 separate areas each of which fitted with 8 partial.
The system is capable of receiving radio signals across the available bandwidth in 433MHz or 868MHz. Each device transmits simultaneously on different frequencies to avoid collisions radio. The method of radio transmission is fully digital FSK, and is of 128-bit rolling code type.
The possibility to connect receivers or devices directly on the R485 bus makes the system very versatile, even for complex installations (houses and/or multi-storey structures, etc..).

1.1 FEATURES

- Fully compatible with all S series accessories
- 2 areas independent of each other, with the possibility of assigning devices to each area separately
- 8 programs per area that can be added to one another
- 1 automatic arming managed by a timer per area
- 4 user timers per area that can be assigned to different users for time-limited access
- 64 users that can be freely assigned
- 2 “route” type arming commands (Slave A-B) per area
- 48 freely programmable zones
- 6 programmable Open Collector outputs, 3 of which on board
- 3 radio modules that can be connected (contained in the keyboard K-Radio, or modules EXPR/S)
- 4 keypads that can be connected (3 model K-Radio keyboard with radio module integrated, or 4 model K-LCD normal keyboards)
- 8 freely connectable and assignable plugs (model PROXIMITY or PR)
- Built-in telephone controller with 16 telephone numbers and optional voice synthesis module
- Recordable voice messages, 200 event (some pre-recorded) and 2 queue messages (identification system)
- Possibility of remotely managing the system from a PC via an optional RS-232 adapter or telephone line (optional remote management MODEM)
- Customizable data transmission with protocol CONTACT ID

1.2 CONNECTIONS

+14.2 Vdc power supply – Terminals **+**, **-**, **ground**, dedicated for the connection of the power supply
Battery Faston – Faston terminals used for the connection of the backup **battery**
Tamper line – Dedicated terminals used for the connection of the anti-tamper line
Fixed loads – Dedicated terminals used to supply power to sensor and other peripherals
O.C. outputs – Dedicated terminals used for the system's Open Collector outputs
Free exchange relay – Relay output that follows the behaviour of the siren outputs
Internal Siren – Relay output used to connect piezo sirens (positive - supplying)
External Siren – Relay output used for the connection of external sirens (positive fail)
Telephones – Dedicated terminals used for the connection of phones
Telephone line – Dedicated terminals used to the connect the incoming telephone line
I/O peripherals – Terminals of BUS RS-485 used to connect the system peripherals (keypads, plugs. etc.)

PERIPHERALS TAMPER

- TAMPER PERIPHERAL 1 KEYPAD 1
- TAMPER PERIPHERAL 2 KEYPAD 2
- TAMPER PERIPHERAL 3 KEYPAD 3
- TAMPER PERIPHERAL 4 KEYPAD 4

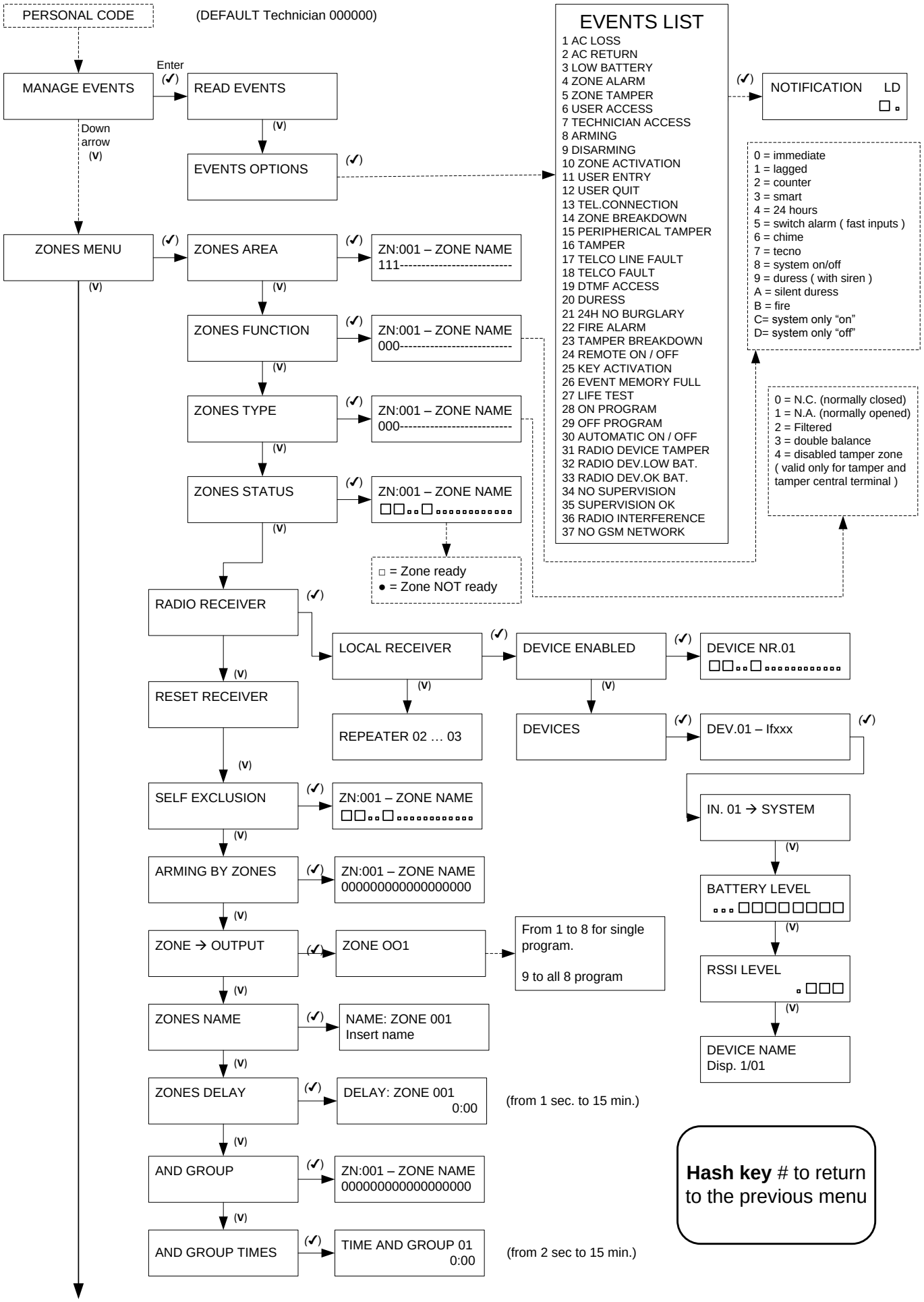
- TAMPER PERIPHERAL 17 PLUG 1
- TAMPER PERIPHERAL 18 PLUG 2
- TAMPER PERIPHERAL 19 PLUG 3
- TAMPER PERIPHERAL 20 PLUG 4
- TAMPER PERIPHERAL 21 PLUG 5
- TAMPER PERIPHERAL 22 PLUG 6
- TAMPER PERIPHERAL 23 PLUG 7
- TAMPER PERIPHERAL 24 PLUG 8

- TAMPER PERIPHERAL 25 EXPANDING OUTPUTS 1

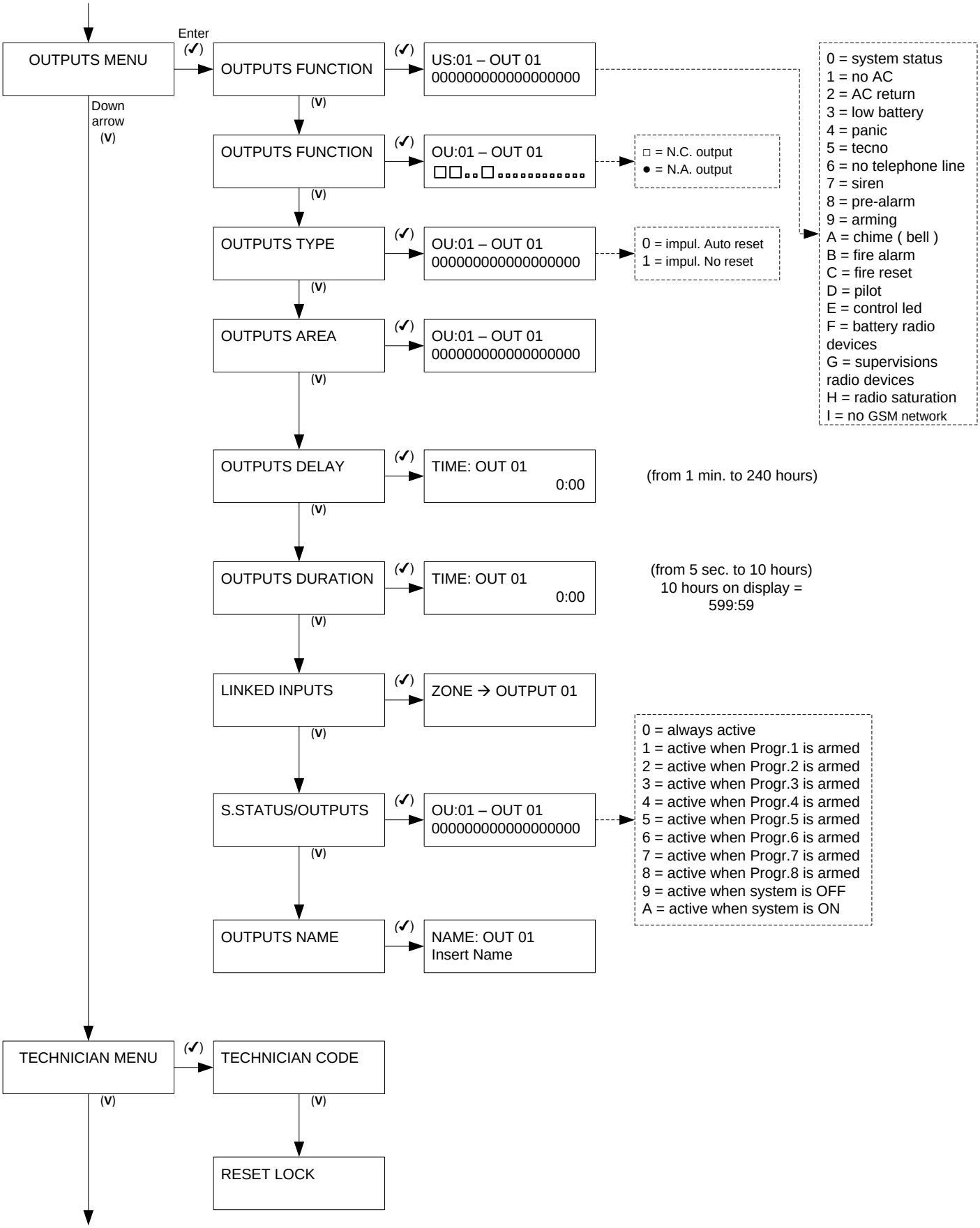
- TAMPER PERIPHERAL 33 EXPANDING INPUTS 1

- TAMPER PERIPHERAL 65 RADIO EXPANSION 1
- TAMPER PERIPHERAL 66 RADIO EXPANSION 2
- TAMPER PERIPHERAL 67 RADIO EXPANSION 3

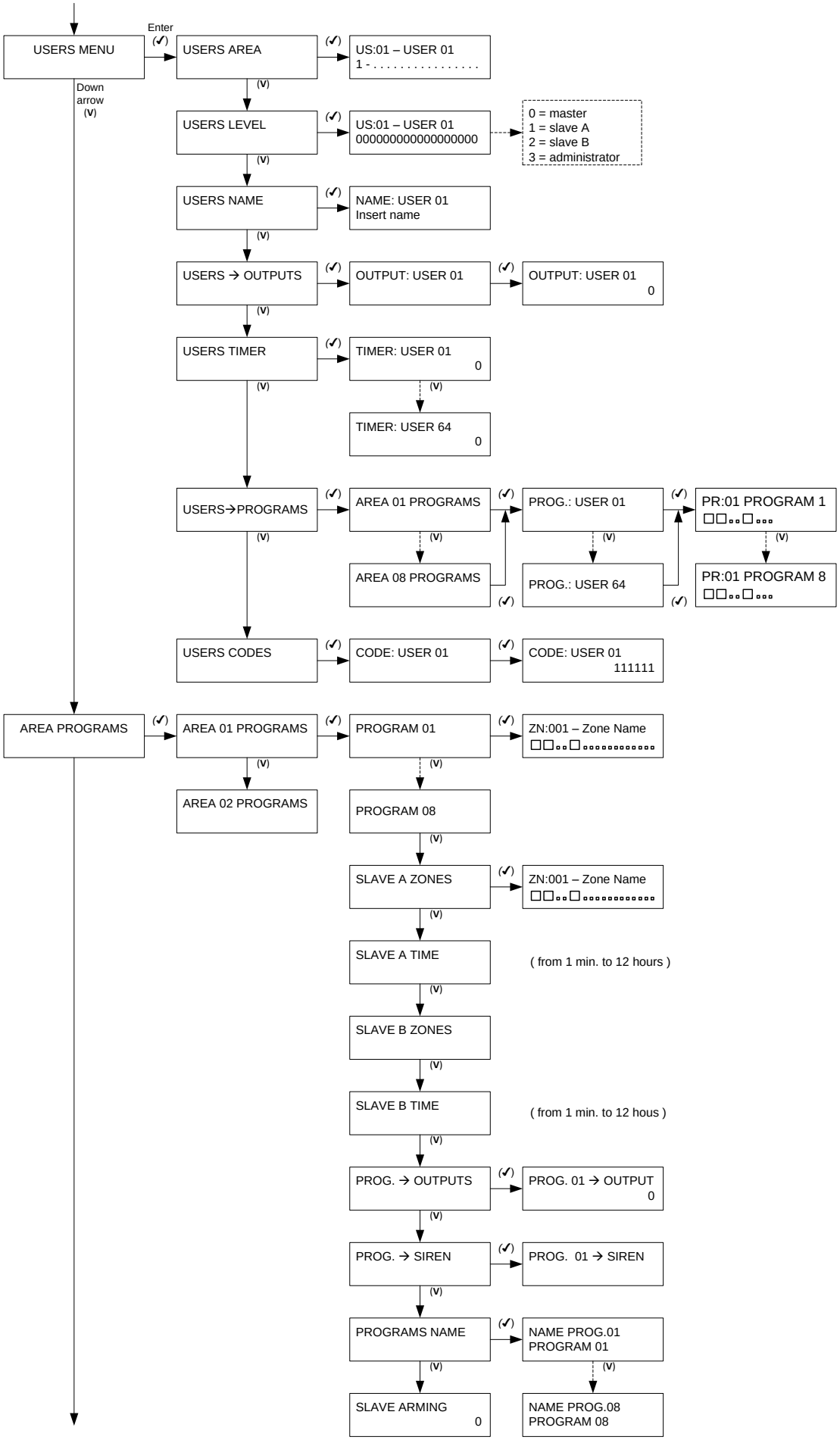
MENU PROGRAMMING by KEYPAD - 1



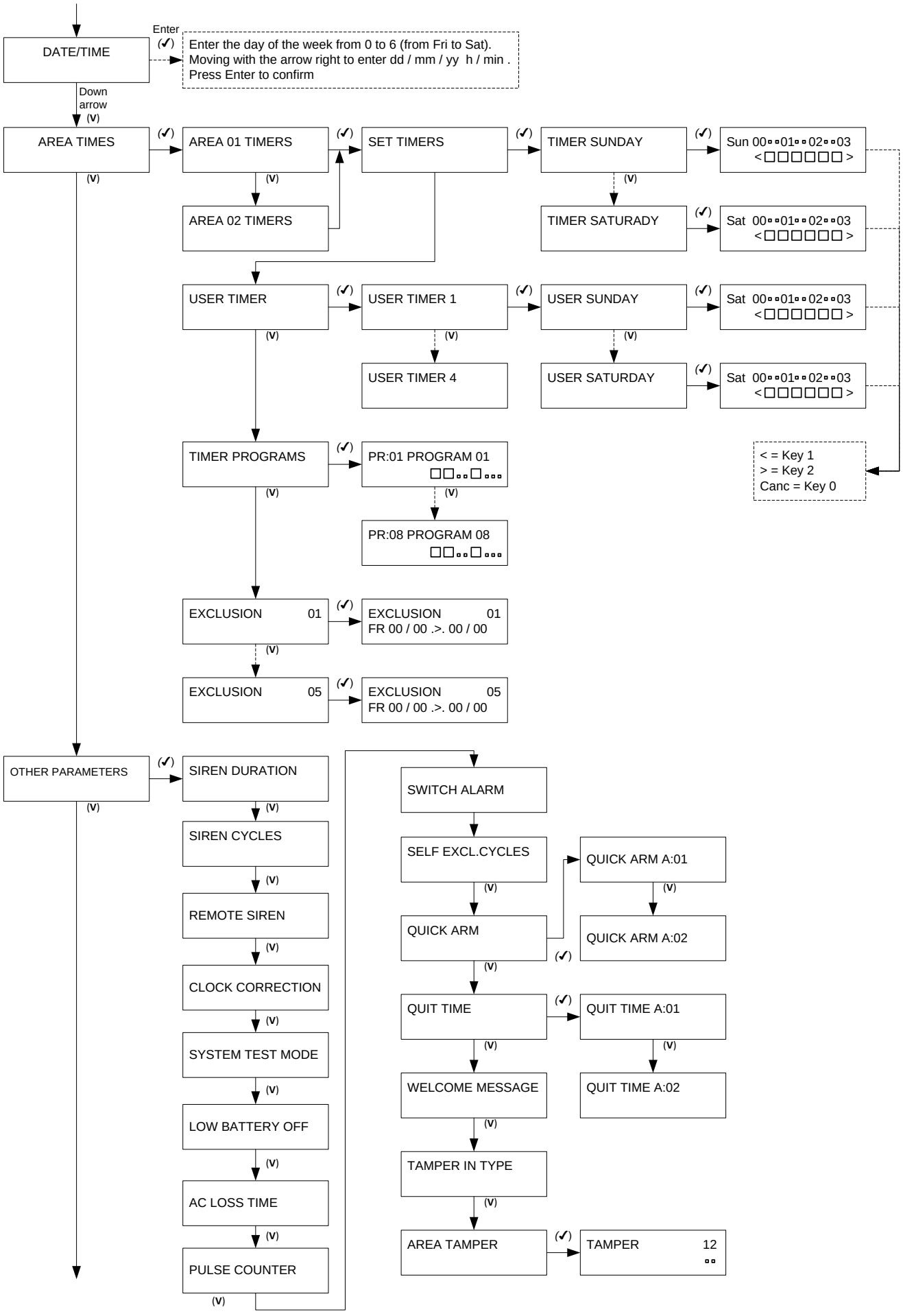
MENU PROGRAMMING by KEYPAD - 2



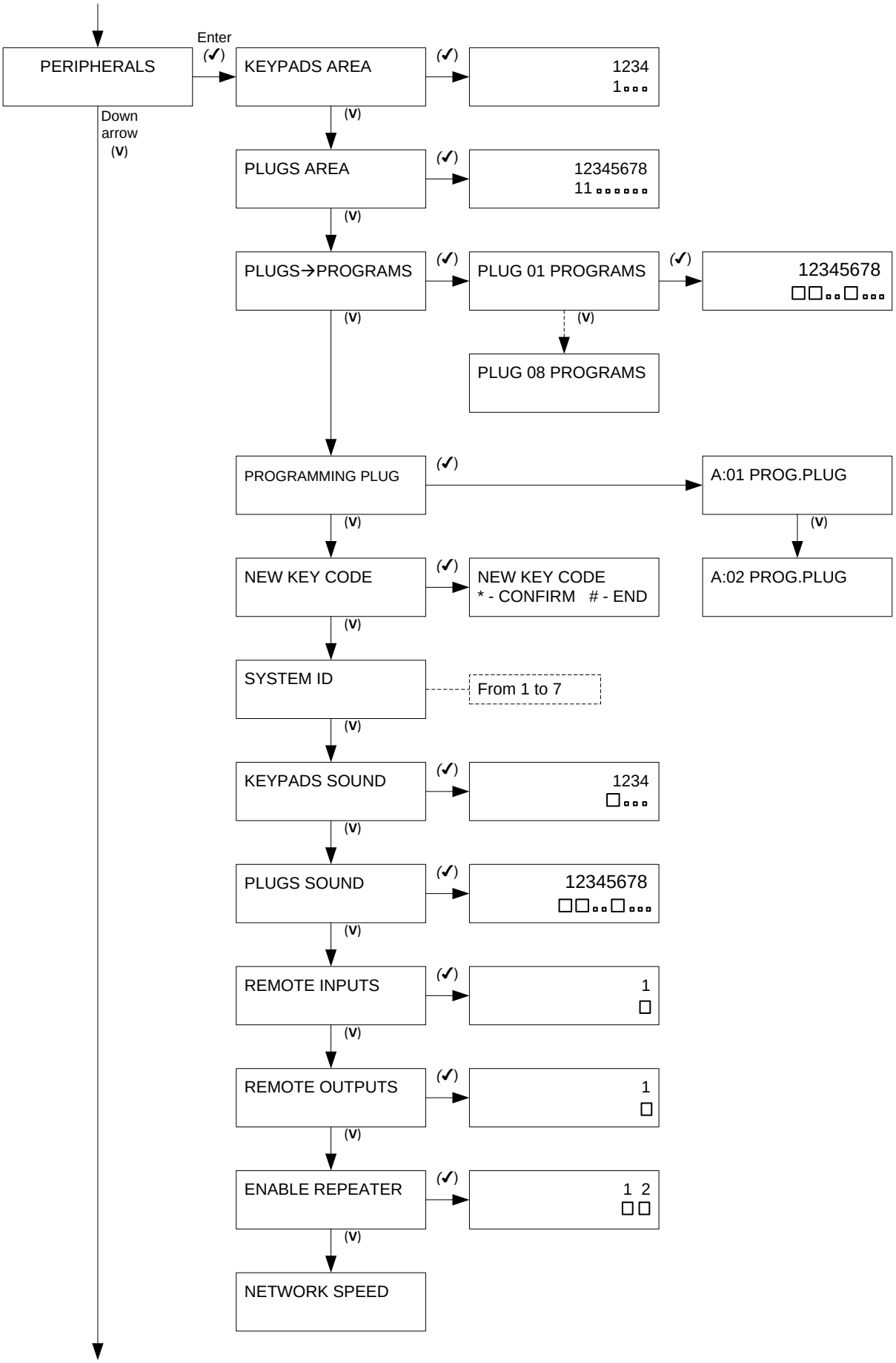
MENU PROGRAMMING by KEYPAD - 3



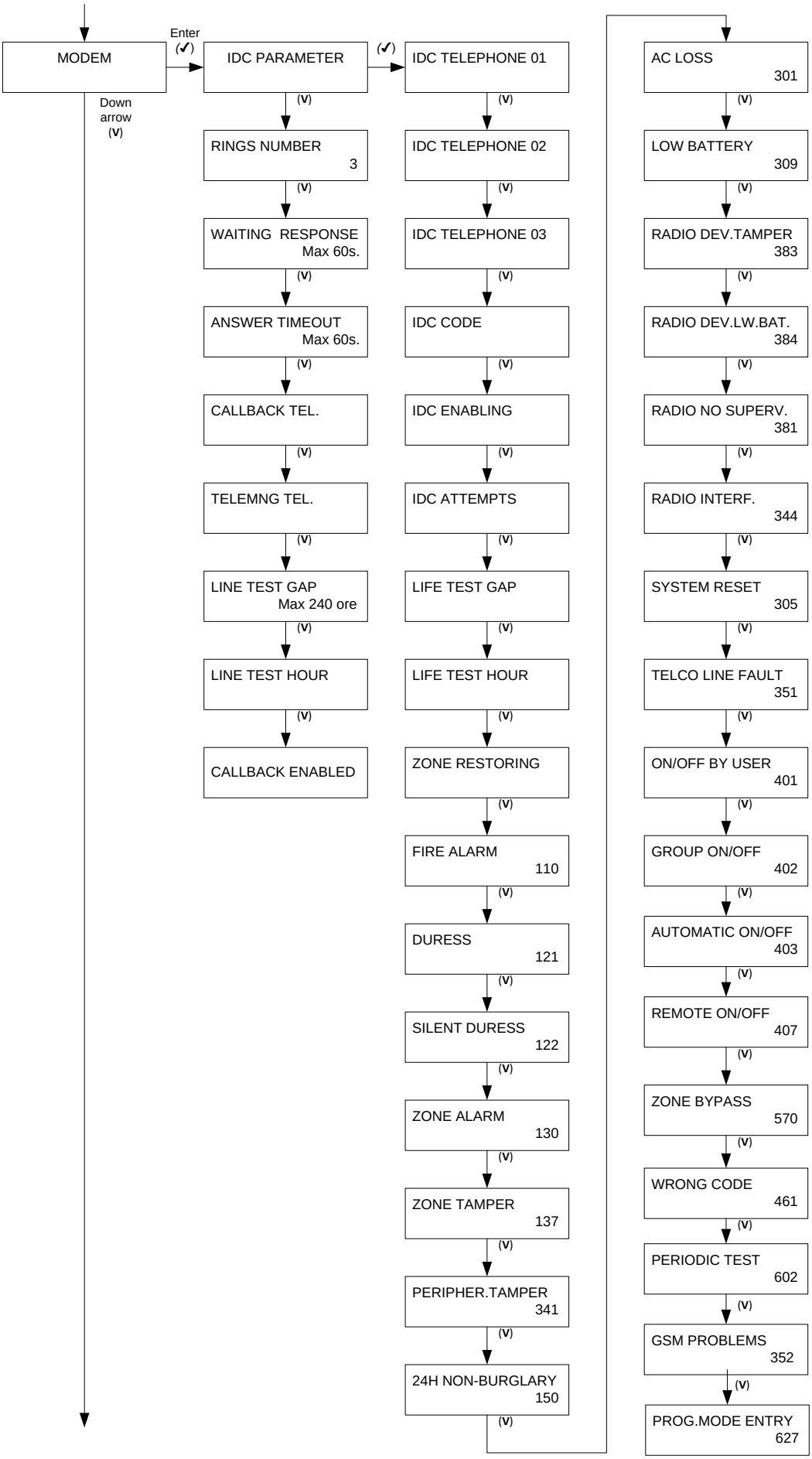
MENU PROGRAMMING by KEYPAD - 4



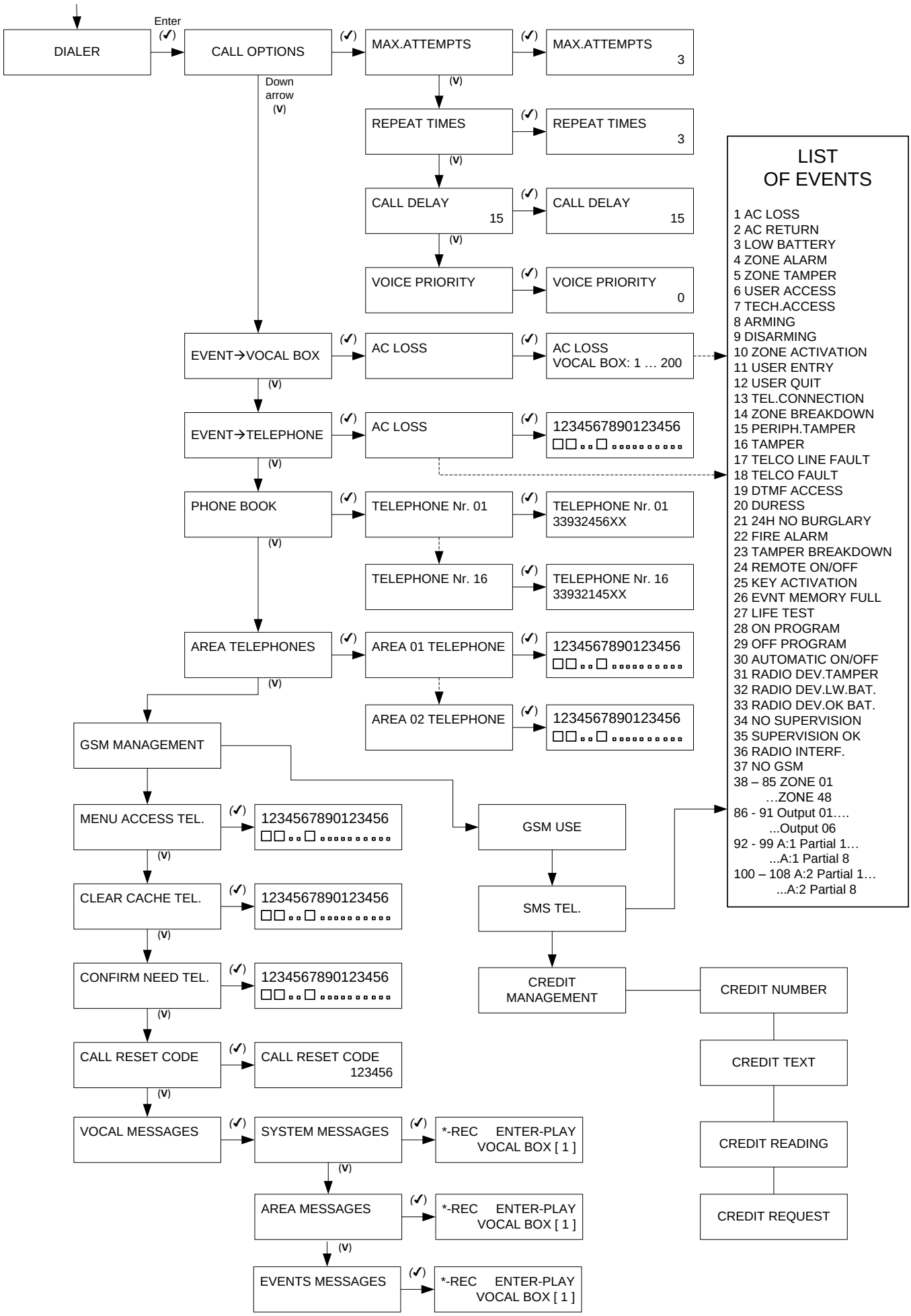
MENU PROGRAMMING by KEYPAD - 5



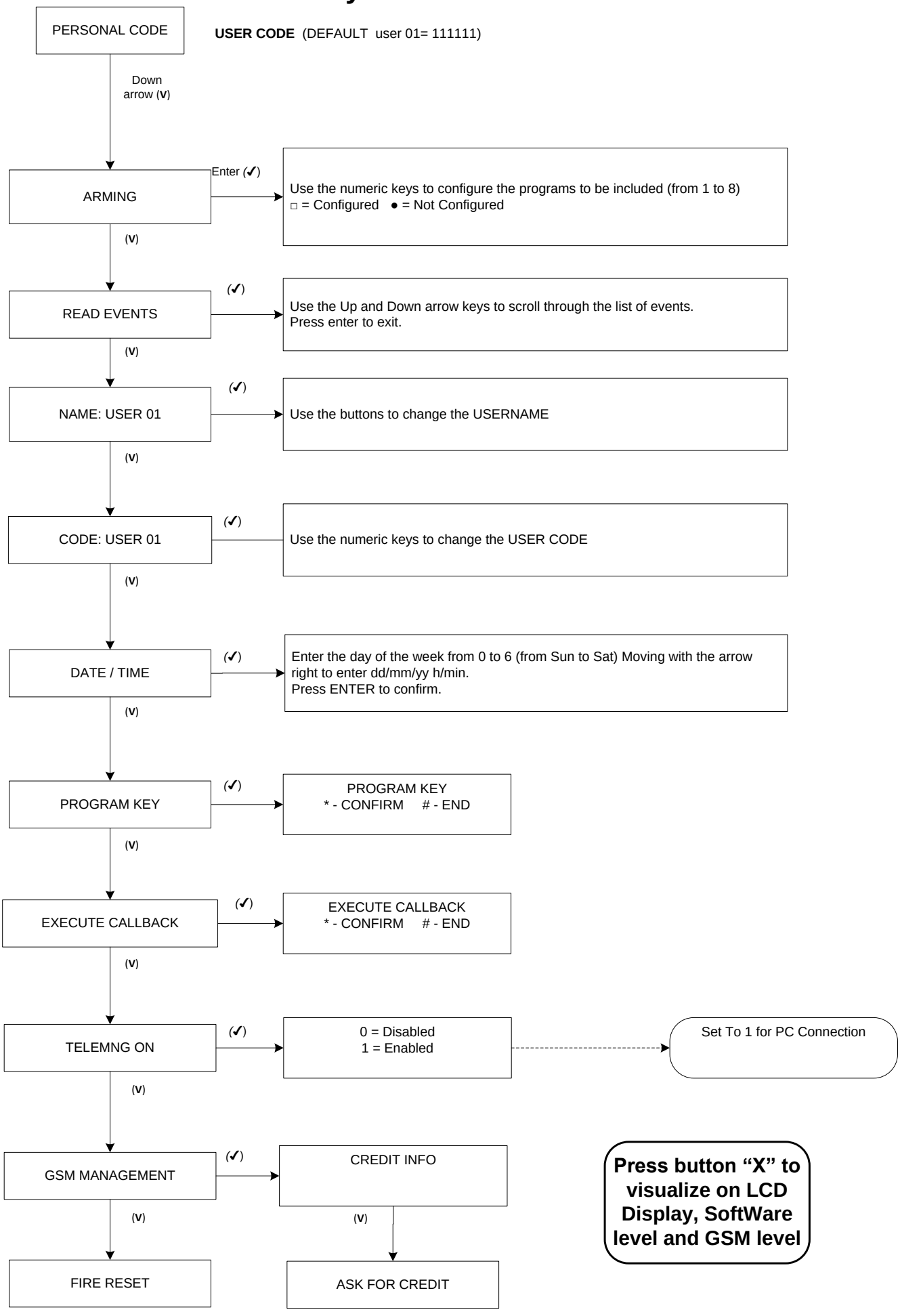
MENU PROGRAMMING by KEYPAD - 6



MENU PROGRAMMING by KEYPAD - 7

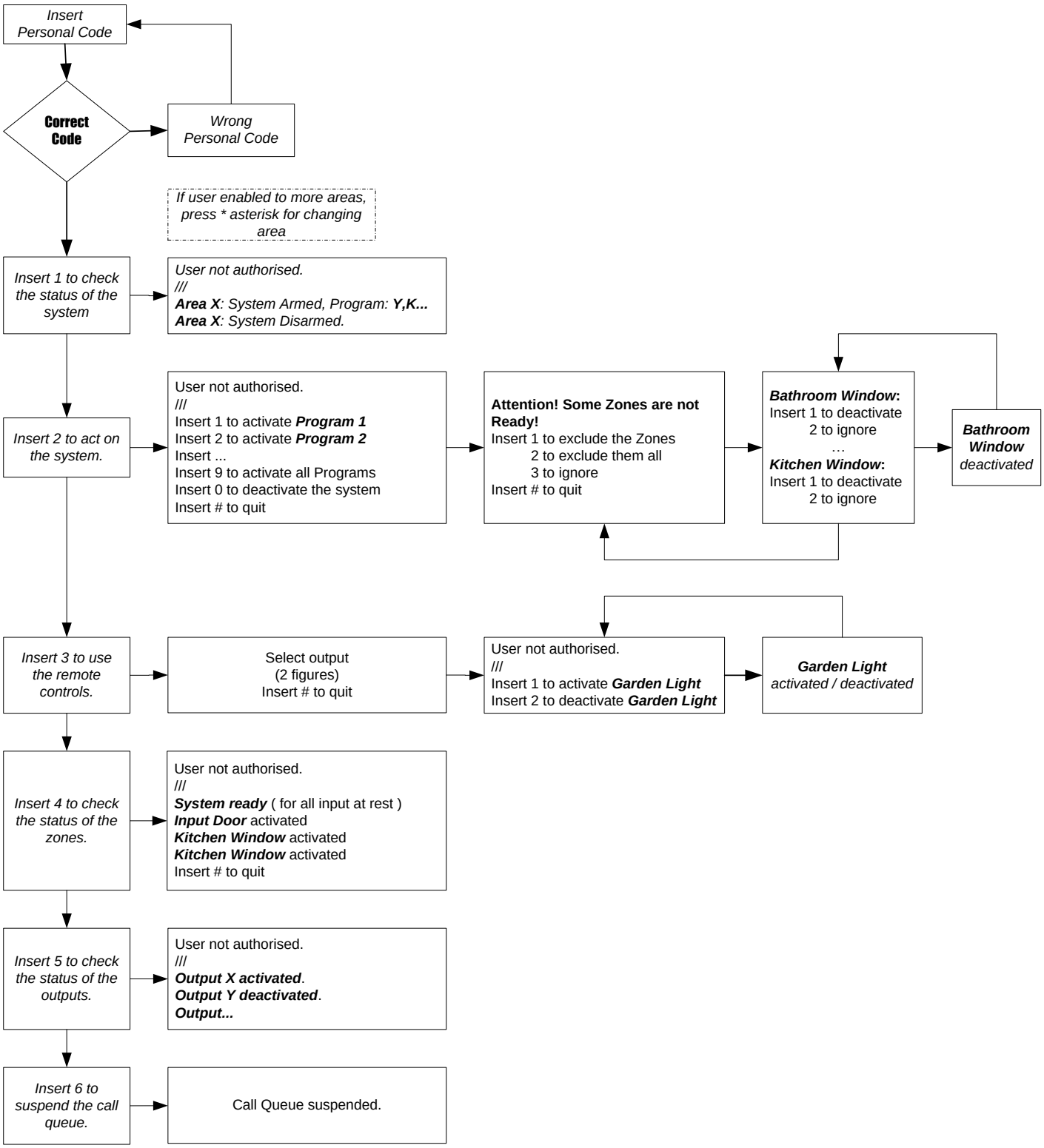


MENU PROGRAMMING by KEYPAD - 8



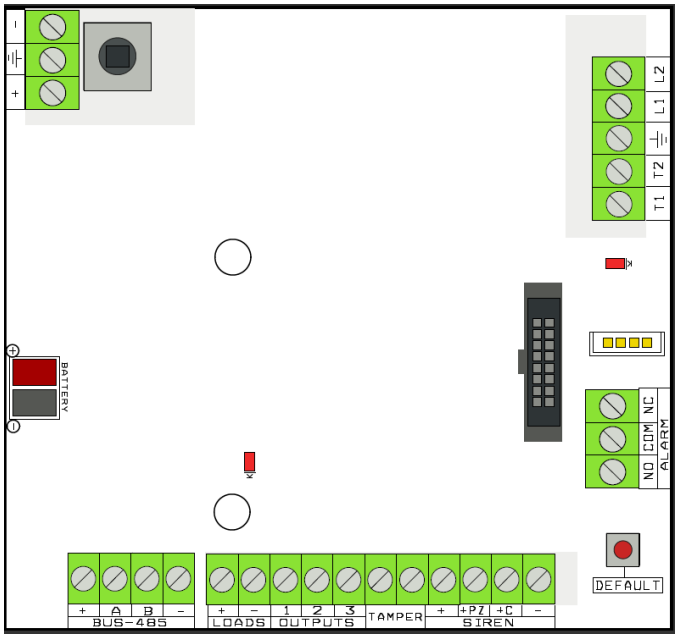
MENU VOICE GUIDE

After the response from the dialer, press the pound key to enter the voice menu.


Insert Personal Code
Correct Code
Wrong Personal Code
If user enabled to more areas, press * asterisk for changing area
Insert 1 to check the status of the system
User not authorised.
///
Area X: System Armed, Program: Y,K...
Area X: System Disarmed.
Insert 2 to act on the system.
User not authorised.
///
Insert 1 to activate Program 1
Insert 2 to activate Program 2
Insert ...
Insert 9 to activate all Programs
Insert 0 to deactivate the system
Insert # to quit
Attention! Some Zones are not Ready!
Insert 1 to exclude the Zones
2 to exclude them all
3 to ignore
Insert # to quit
Bathroom Window:
Insert 1 to deactivate
2 to ignore
…
Kitchen Window:
Insert 1 to deactivate
2 to ignore
Bathroom Window deactivated
Insert 3 to use the remote controls.
Select output
(2 figures)
Insert # to quit
User not authorised.
///
Insert 1 to activate Garden Light
Insert 2 to deactivate Garden Light
Garden Light activated / deactivated
Insert 4 to check the status of the zones.
User not authorised.
///
System ready (for all input at rest)
Input Door activated
Kitchen Window activated
Kitchen Window activated
Insert # to quit
Insert 5 to check the status of the outputs.
User not authorised.
///
Output X activated.
Output Y deactivated.
Output...
Insert 6 to suspend the call queue.
Call Queue suspended.

The voice " unauthorized user " is used when the code you use to enter the menu on the voice guidance is not a valid code for that area..

FEATURES AND CONNECTIONS



Note: it is always advisable to connect the peripherals in cascade, in order to enter and exit each peripheral. The connection cable must be shielded and possibly "twisted" to be able to benefit from maximum efficiency and length.

CONNECT THE BATTERY TO THE FASTON CONNECTORS OF THE SYSTEM (LOAD STATUS CONTROL ACTIVE).
YOU CAN ALSO CONNECT AN ADDITIONAL BATTERY TO THE FASTON CONNECTORS OF THE POWER SUPPLY (LOAD STATUS CONTROL UNAVAILABLE).

1.3 KEYPADS AND PLUGS

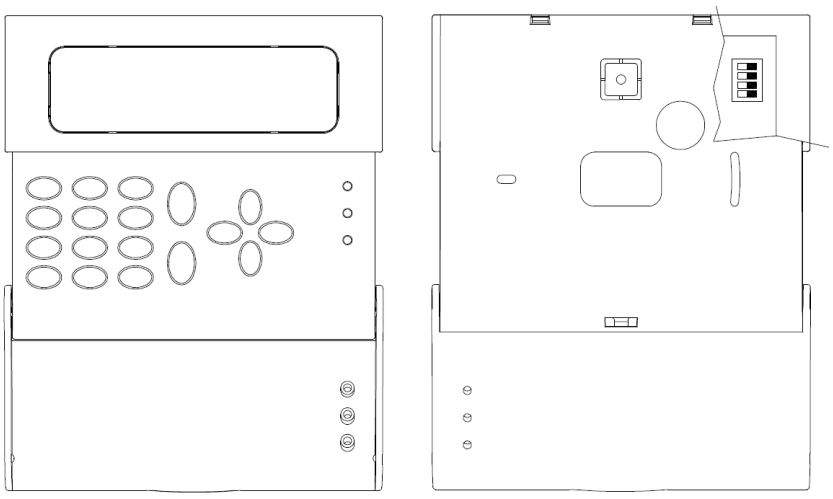
The control peripherals that can be used with this system include:

Keypads (model K-LCD or K-RADIO), up to a maximum number of 4;
Plugs (model PROXIMITY or PR/S), up to a maximum number of 8

All these peripherals must be connected to terminals **A, B, +12V and –**.

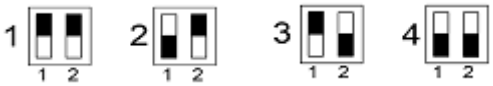
Before powering the system, you need to differentiate the peripherals, which means assigning the keypads using their dip-switches and the plugs using their jumpers.

For information on addressing, see the following figure:
ATTENTION: always follow an incremental order starting from 1 both for the keypads and plugs, without forgetting any of the locations.

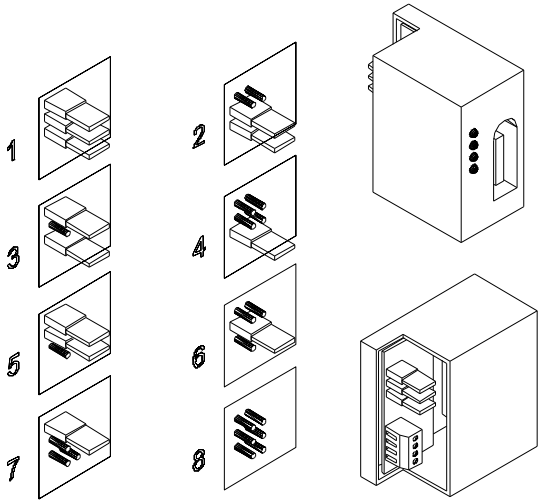


K-LCD Dip Switch Configuration

K-RADIO Dip Switch Configuration



PR/S Dip Switch Configuration



PROXIMITY Dip Switch Configuration

PLEASE NOTE: as already explained in section AREAS, after powering the system, you will always have to enable each peripheral manually following the instructions provided in sections:

1.4 EXPANDING INPUTS

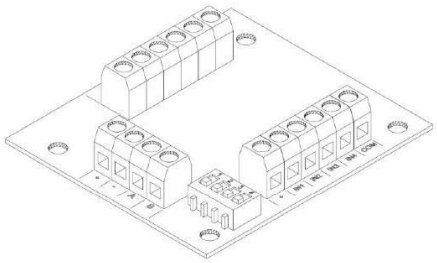
The unit has 48 via radio inputs.

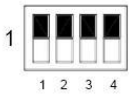
For any need you can get 8 wired inputs, by connecting the optional module EXPIN / S; these inputs are configurable in the system from IN41 to IN48. This module must be connected to the serial line RS-485, which belongs to the terminals A, B, +12 V and - already used for other peripherals.
The inputs, which are part of the expansion to terminals IN1, 2, 3 to IN8, can be configured in the following kinds:

from	**IN1** to **IN6**	= N.C. / N.O. / Filtered / Double balancing inputs
	IN7 and **IN8**	= N.C. / N.O. inputs alternatively used for fast Switch-Alarm or inertia contacts

Make sure that the expansion's switches (DIP-SWITCH) are properly placed to off (see diagram).

For the input connection, follow the instructions in paragraph 1.10 – ZONE INPUTS.

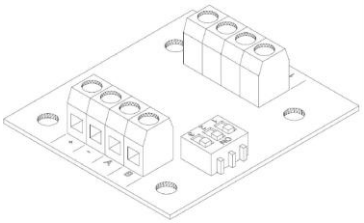


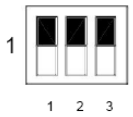


Dip Switch Configuration

1.5 EXPANDING OUTPUTS

To expand the system by adding further outputs (the maximum configuration is 6 outputs), you need to connect optional module EXPUS/S to serial line RS485.
You can use up to a maximum of 1 EXPUS/S module; Make sure that the expansion's switches (DIP-SWITCH) are properly placed to off (see diagram).





Dip Switch Configuration

The expansion adds three new outputs (terminals OUT1, OUT2 and OUT3) that can be used in the same way as the three on system board.

1.6 RADIO EXPANSION

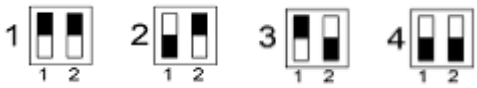
The control unit in the initial configuration (base + keyboard) can store up to 32 devices including remote controls, magnetic contacts, volumetric detectors and curtain effect detectors. In order to expand the number of radio devices you have to connect other keyboards K-Radio, or expansions EXPR / S on the RS485 serial line; the maximum number of expansions is 2, and allows you to bring the devices to 96 presets.

1.6.1 RADIO EXPANSION K-RADIO

Each keypad must be configured using its DIP switches on the rear;

- KEYBOARD ADDRESS only for keypad configuration
- HW ADDRESS only for expansion configuration

The first keypad must always have the dip KEYBOARD ADDRESS and HW ADDRESS in OFF position. Additional keyboards must have the dip, both KEYBOARD ADDRESS and HW ADDRESS setted up considering the number of keyboards and / or radio receivers present, and setting up again following an ascending order, starting from the No. 1 forward, never forgetting any position. As in the following figure:

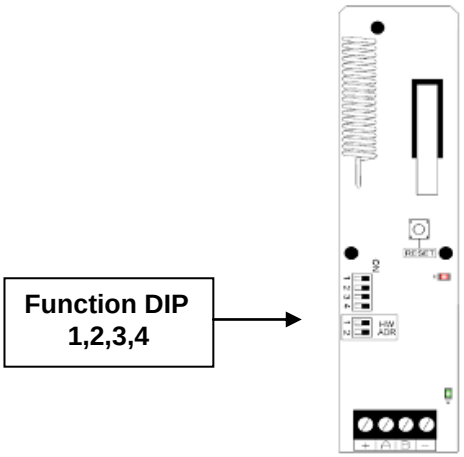


WARNING: The keyboards follow their configuration (on K-Radio, Keyboard Address), with their ascending order. The radio expansions follow their configuration (on K-Radio HW Address), which must be made taking into consideration the possible Expr / S present and must always go in ascending order starting from the No. 1 forward, without neglecting any position.
The 1st radio expansion in each case is that present on the 1st K-RADIO

1.6.2 RADIO EXPANSION EXPR/S

Each board EXPR / S, which can store up to 32 devices, must be configured through its switches on the rear → HW ADR, following the pattern shown in the following figure " Dip Switch Configuration ".

WARNING: the " sequence " of the number of configuration must take into account any expansion present on K-Radio and should be continued accordingly.
Example: if two expansions already present on K-Radio, The Dip configuration of the EXPR must be the No. 3.



Dip Switch Configuration

1.7 VOICE MODULE

The system is fitted with a built-in telephone controller that can be used with an optional voice sampling module (model SV/S) to provide voice synthesis features to the telephone controller. For information on how to program and use this module, see section VOICE SYNTHESIS.
To connect the telephone line, use terminals LA and LB on the module.
The other telephone devices present on the telephone line must be connected between terminals TA and TB, to ensure that the alarm system has priority over any other telephone device connected to the line.

IMPORTANT: before inserting or removing the voice module, disconnect the system from the power supply (battery or mains) and wait at least 10 seconds.

1.8 AREAS OPERATION LOGIC

The unit manages two areas with the possibility of activating multiple areas simultaneously.
Each zone can be assigned to different areas; in this case the breach of that zone will cause an alarm only if ALL of the areas which it is assigned are included.

1.9 ALLOCATION OF AREAS TO THE ZONES

Each area corresponds to an autonomous system, with its users, its keyboard, its plug and its inputs. All these resources are freely assignable, by programming.
If you use multiple areas, each area is completely independent of other areas.

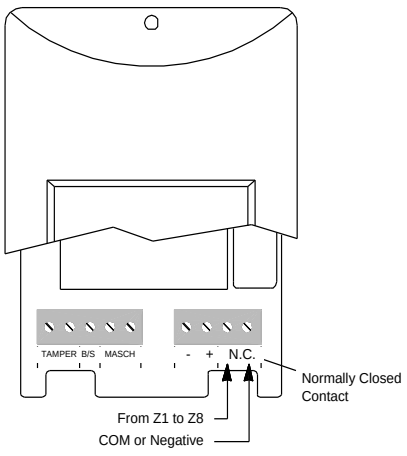
NB: All resources (keyboards, users, plugs etc.) that are not associated with any area, (value 0) are disabled and therefore not working.

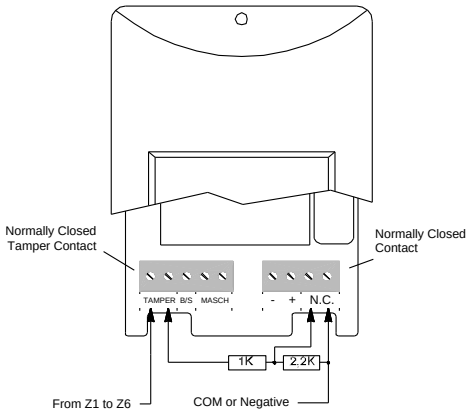
1.10 ZONE INPUTS

" Normally closed " mode

These refer to the COM terminal that corresponds to the power supply negative.
By default, they are NORMALLY CLOSED (N.C.) input designed to be connected as follows:

You can also configure a normally closed input as switch-alarm (see section Inputs function).





“ Double balancing ” mode

You can freely protect each input from the cutting or short-circuit of cables (protection against tampering, 24h TAMPER).
To do so, you need to program a “double balancing” input and connect the resistors supplied as shown in the following diagram:
PLEASE NOTE: for this connection to be effective, you will need to connect the resistors directly to the sensor and not to the system.

Note:
1K = Brown-Black-Red
2,2K = Red-Red-Red

1.11 EXTERNAL SIREN

The system is designed to directly control self-powered sirens with a positive lock (+12 V). The output used for this purpose is terminal +C (positive - receiving). Terminals + and – are instead used to provide the recharge current for the siren battery (13.8 V output).

1.12 FREE EXCHANGE ALARM RELAY

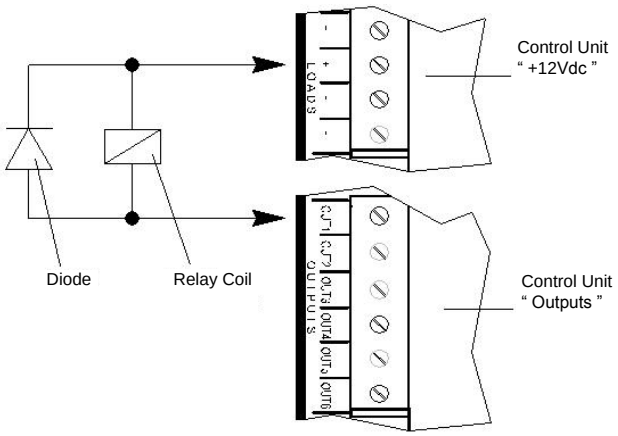
You can use the free exchange of the alarm relay.
The maximum current that can be handled by this contact is 2A. It can be used for sirens with N.C. contact lock and luminous and/or acoustic alarms other than those issued by the siren.

1.13 INTERNAL SIREN

Connect a siren directly between terminal +PZ and a negative pole of the power supply (-).
ATTENTION: use ONLY indoor piezo sirens (for example model AMC PZ2).

1.14 PROGRAMMABLE OUTPUTS

The system has 3 freely configurable Open Collector outputs (that can be expanded to 6). These outputs are connected to the OUTPUTS terminals on the board.
When an output enables/disables (depending on the set polarity), it transmits a reference signal to the negative pole. In the opposite case, it does not generate voltage, but remains open (high impedance status).
The maximum current that may circulate on each output is 100 mA. If the load is expected to be above the maximum permitted value, it is necessary to use a relay.
ATTENTION: ALWAYS connect a diode, as shown in the figure, when using relays.



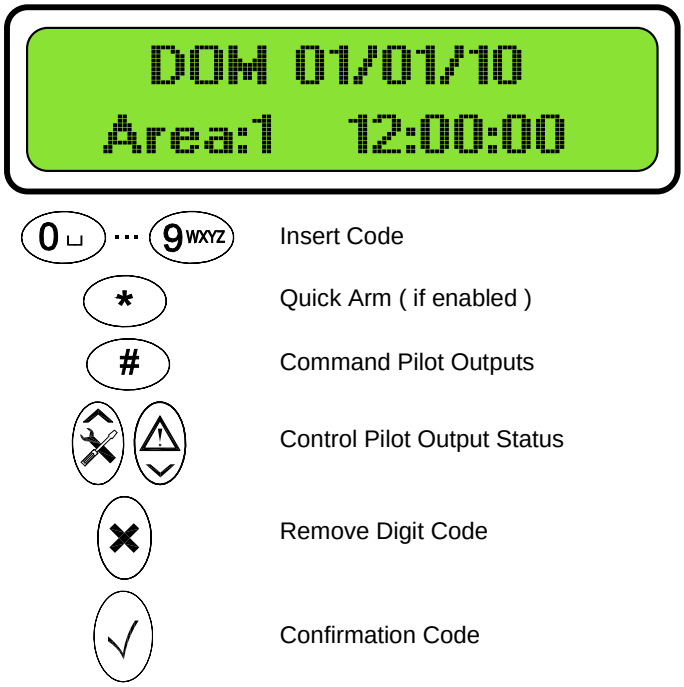
2. PROGRAMMING

NOTE: before programming any parameter, it is important to know how the keypad keys work, be familiar with the terms used in this manual and know the sequence that has to be followed.

2.1 KEYPAD KEYS AND LUMINOUS INDICATORS

2.1.1 K-LCD or K-RADIO keypad

In addition to the keys numbered from 0 to 9, the keypad also has other keys with symbols that are assigned to the specific features, depending on the menu selected during the programming phase.
Note: to assign a letter instead of a number to a features, you need to press in sequence two numerical keys:



A = press 0 twice
B = press 1 twice
C = press 2 twice
D = press 3 twice
E = press 4 twice

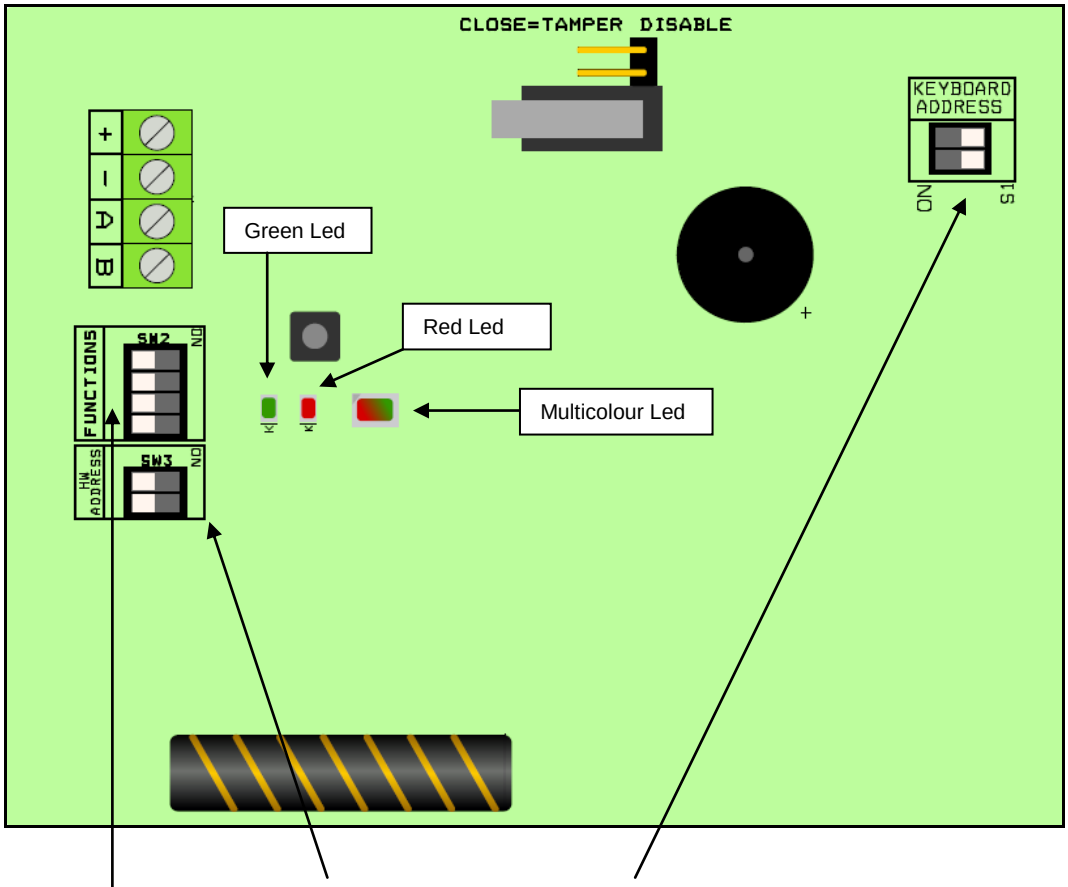
The keypad also has 3 LEDs that are used as luminous indicators.

Yellow LED **:** provides information on the status of the system (On = system armed, Off = system disarmed)
Red LED **:** provides information on stored events (On = Event in memory to read, Off = No event to read)
Green LED **:** provides information on control status of the system (On = System in good working order, Off = Open or faulty zones or peripherals)

Note: all details on the key features are provided in the following sections and described in detail in the paragraphs related to the individual programming phases.

2.1.2 K-RADIO keypad

The K-Radio keypad, in addition to the functions and indications of the LEDs described above, has in the back of the card other LEDs and DIP switches used to manage the on-board radio expansion.



For the setting of the micro switch, HW ADDRESS and KEYBOARD ADDRESS, see the specific paragraph “1.3 KEYPADS AND PLUGS ” and “1.6.1 RADIO EXPANSIONS ”.

FUNCTIONS OF THE DIP-SWITCH, as well as in the specific paragraphs is given below

- Dip 1 = when ON is being storing / canceling of wireless devices
- Dip 2 = indicates the type of signal that is necessary to send from your device at the phase of self learning, when OFF only signals LEARN (press the little key on the eponymous device), when ON all signals are valid (Learn, alarm, tamper and supervision)
- Dip 3 → **only on EXPR / S** (on the K-RADIO disabled) = enables the Tamper device micro switch
- Dip 4 = disable the SATURATION RADIO detection system

	GREEN LED (RADIO SECTION STATUS)	**RED LED** (RADIO DEVICES STATUS)
OFF	Indicates that the expansion is fails or not power supplied.	Normal Operation
ON	Indicates communication problems with the system (for EXPR / S it’s possible that A and B are connected wrong)	(Flashing) Indicates the learning of a new device
SLOW FLASHING	/	At least one radio device open
FAST FLASHING	Communicating but not enabled in central	Storage device completed
FLASH EVERY 2 SECONDS	Normal operation (in use)	At least one non-supervisory

SIGNIFICANCE OF MULTICOLOR LED (inside K-RADIO)

Multicolor LED indicates the correct reception of radio signals transmitted from devices programmed. At each reception will turn on for one second, then the color indicates the intensity of the signal received in accordance with the following correspondence: **Green** – Better Signal **Yellow** – Sufficient Signal **Red** – Poor Signal

2.2 USING THE MENU

To open the system menus, you always need to enter a user code. The system offers 2 different menus: the **TECHNICAL MENU** that can be used to program all the system parameters and the **USERS MENU** that can be used to perform operations reserved to users like arming, programming keys, etc.).

2.3 ACCESSING THE TECHNICAL MENU

To open the Technical Menu, which enables you o change all the system parameters, you need to enter a technician code and press ↵ to confirm. The default technician code is 00000.

Procedure:

- Enter the TECHNICIAN code (the default code is 000000) and press ↵ to confirm.

2.4 ACCESSING THE USERS MENU

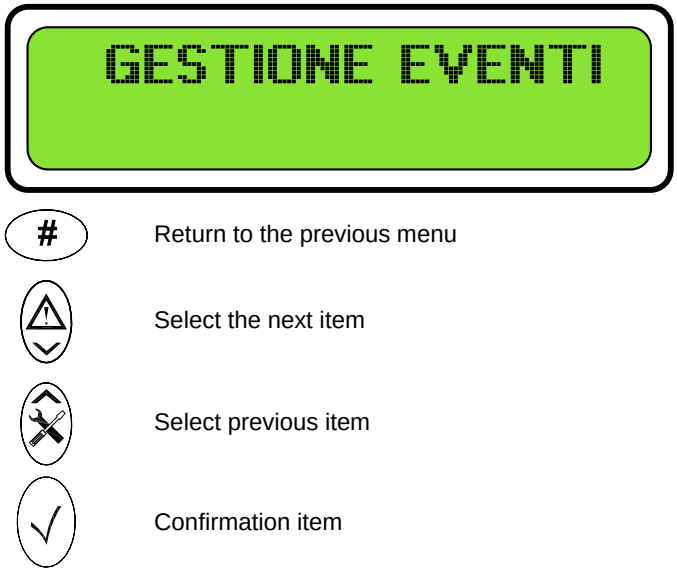
First of all check that the keypad is configured to be used in one of the areas enabled for access.
Then, press ↵ to display the area you wish to use.
Enter the user code and press ↵ to confirm. The default setting of this parameter is 111111.

Procedure:

- Enter the USER code (the default code is 111111) and press ↵ to confirm.

ATTENTION: User 1 is the only user assigned to Area 1 and to the default user code shown above. For information on how to assign areas and set the user code for other users, see the relevant paragraphs.

2.5 BROWSING THE MENUS

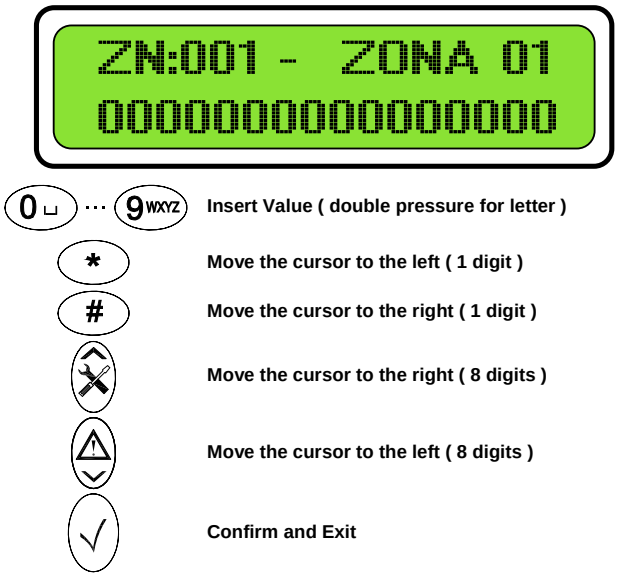


Note: menus scroll in a loop; therefore when you reach the last parameter, you can press ↓ to return to the first one).

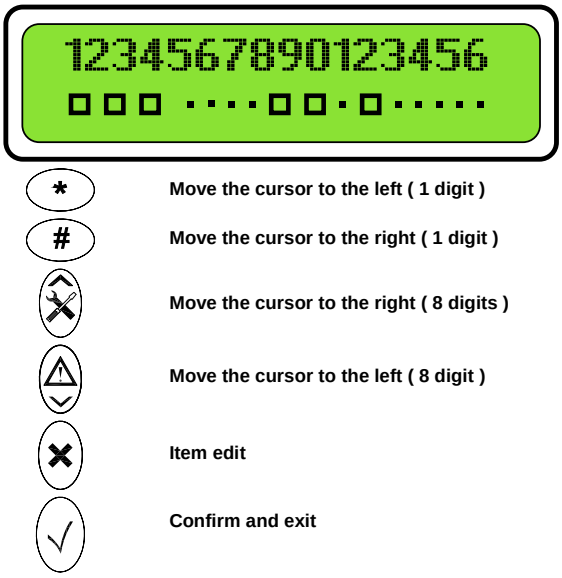
2.6 SETTING DATA WITHIN A MENU

You can use 3 different graphic interfaces depending on the parameters you wish to change:

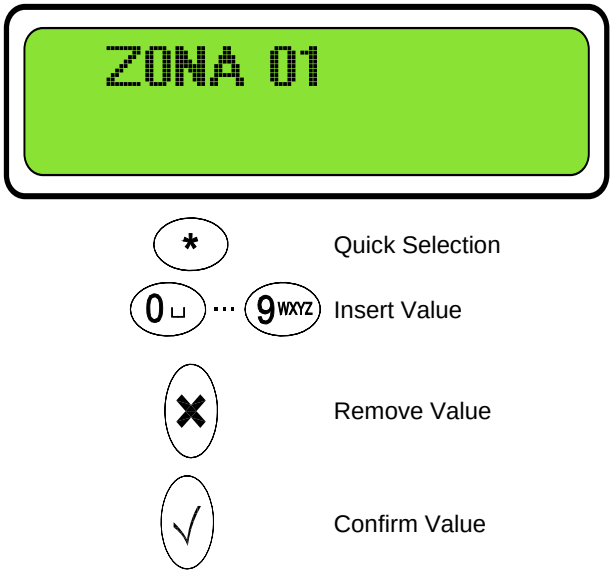
First


ZN:001 - ZONA 01
0000000000000000
0␣ ··· 9WXYZ
Insert Value (double pressure for letter)
*
Move the cursor to the left (1 digit)
#
Move the cursor to the right (1 digit)
Move the cursor to the right (8 digits)
Move the cursor to the left (8 digits)
Confirm and Exit

Second


1234567890123456
□□□ ····□□·□·····
*
Move the cursor to the left (1 digit)
#
Move the cursor to the right (1 digit)
Move the cursor to the right (8 digits)
Move the cursor to the left (8 digit)
Item edit
Confirm and exit

Third



2.7 INITIAL RESET

Verify that the system is not powered. Supply power (through the battery or mains) by pressing the RESET key on the board for at least 2 seconds. When you release the key, the system deletes all the data and resets all parameters to their default values.

Summary of the default settings:

- KEYPAD 1 enabled
- Codes: TECHNICIAN (000000); USER 1 (111111)
- Inputs configured as N.C., and the first 8 assigned to Area 1
- Inputs configured as INSTANTANEOUS
- NO electronic key enabled
- NO INPUT and/or OUTPUT EXPANSION MODULE enabled
- System TAMPER disabled
- TEST MODE enabled (ATTENTION! IN THIS MODE THE SIREN IS DISABLED)
- REMOTE MANAGEMENT (via cable and remotely) disabled

3. PERIPHERALS

3.1 CONFIGURING THE KEYPADS (Keypads area)

After the initial reset, the only operating keypad is KEYPAD 1, where all the dip-switches are in position OFF. You can use this keypad to enable other keypads and assign them to an area.

PLEASE NOTE: before powering the system, verify that each keypad is configured with a unique address, following the instructions provided in section – KEYPADS AND PLUGS.

Procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Uses keys [↑] and [↓] to select PERIPHERALS and press ↵ to confirm.
- Select KEYPADS AREA and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the keypad you wish to enable (keypad from 1 to 4), shown in the row above.
- Enter 1 or 2 to assign a keypad to the desired area or remove the assignment.
- To view all the areas to which a keyboard is assigned press 0 repeatedly.
- In particular:
  - • = Keypad Disabled
  - \- = Keypad Enabled at least one area
  - 1 = Keyapd associated with the area 1
  - 2 = Keyapd associated with the area 2
- After assigning all the required keypads, press [↵] to confirm.

Note: pay attention not to enable keypads that don't exist, otherwise the system will issue a PERIPHERAL tamper warning. Warnings related to the tampering of keypads display as PERIPHERAL TAMPER 1….4.

After each enabling operation, check immediately that the corresponding keypad is able to correctly communicate with the system: all keypads assigned to the same area of the keypad used for programming should display SYSTEM LOCK, while those assigned to a different area will alternatively display the DATE/TIME and WELCOME MESSAGE. Even the keypads of area 1 will alternatively display the DATE/TIME and WELCOME MESSAGE, though only when you exit a menu.

3.2 CONFIGURING THE PLUGS

After the initial reset, NO plug (though connected) is enabled (which means that that the control LED is off). You can use an enabled keypad to enable other connected plugs (models PR/S and PROXIMITY).
After having enabled them, you need to specify which plug users can use to program their own keys (it is possible to specify one plug per area only).

ATTENTION: if the keys are already used for other systems, you will need to change the SYSTEM ID.

PLEASE NOTE: before powering the system, verify that each plug is configured with a unique address, following the instructions provided in section 1.3 – KEYPADS AND PLUGS.

Procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press ↵ to confirm.
- Use keys [↑] and [↓] to select PLUGS AREA and press ↵ to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the plug you wish to enable (plugs from 1 to 8), shown in the row above.
- Enter 1 or 2 to enable/disable the plug for the desired area.

  In particular:

  0 = Plug disabled
  1 = Plug assigned to area 1
  2 = Plug assigned to area 2

- After assigning all the required plugs, press [↵] to confirm.

NOTE: after enabling the plugs, check that the green system control LED switches on when all the zones of the area are idle.

ATTENTION: pay attention not to enable plugs that don't exist, otherwise the system will issue a PERIPHERAL tamper warning. Warnings related to the tampering of plugs display as PERIPHERAL TAMPER 17…24.

3.3 PLUGS → PROGRAMS

From this menu you can define, for each plug, which partial programs you can arm / disarm

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press ↵ to confirm.
- Use keys [↑] and [↓] to select PLUGS → PROGRAMS and press ↵ to confirm.
- Use keys [↑] and [↓] to select the desired plug (from 01 to 08) and press ↵ to confirm.
- Use **CANC** key to select the program that can be armed / disarmed by this plug (max 3). Press ↵ to confirm.

3.4 SELECTING THE PLUG TO PROGRAM KEYS

You can make that one of the plugs enabled can be used for programming the electronic keys (model Beatle or INS / EP). To do this follow the steps below:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press ↵ to confirm.
- Use keys [↑] and [↓] to select PROGRAMMING PLUG and press ↵ to confirm.
- Use keys [↑] and [↓] to select the desired Area and press ↵.
- Press any key from 1 to 8 to select the desired plug.
- Press [↵] to confirm.

Note: if there are several areas, repeat the procedure described for all the remaining areas.

PLEASE NOTE: always verify that the plugs set for the programming of keys belong to the selected area, otherwise you will no longer be able to perform any operation with it.

At this point you can check that the plugs are working correctly by following this procedure:

- Press [#] to exit from the Technician Menu until the WELCOME MESSAGE displays.
- Enter your user code to open the Users Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PROG. KEY and press ↵ to confirm.
- Press [✳]. The LEDs on the programming plug will start to flash at short intervals.
- Insert a key and leave it inserted until the LED switches off.
- Remove the key and quit the Users Menu by pressing [#] several times.
- Insert the key in each plug and verify that the LEDs switch on as shown below.

3.5 OPERATION OF THE PLUGS LEDS

With key removed:

1	Orange LED on	Not used
2	Yellow LED on	System armed
3	Red LED on	Alarm memory
4	Green LED on	All zones are idle

With key inserted:

1	Orange LED on	Not used
2	Yellow LED on	Used to notify the arming of a program
3	Red LED on	Used to notify the arming of a program
4	Green LED on	Used to notify the arming of a program

- During the quit time Yellow LED flashes.
- During an alarm condition, the LEDs switch on and flash simultaneously.
- During a disarming the Orange LED will turn on with the armed program LED.

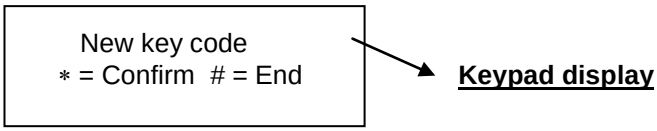
3.6 DELETING ALL THE PROGRAMMED KEYS (new key code)

Every key is always assigned to a user. When you change a user code, the corresponding keys continue to be valid and are not automatically deleted. To delete a key (for example because it has been lost), you need to delete all the key using parameter NEW KEY CODE. This operation changes the key code only, not the user code.

NOTE: after deleting the keys, it is necessary to reprogram them all.

To do so, follow this procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press [↵] to confirm.
- Use keys [↑] and [↓] to select NEW KEY CODE and press [↵] to confirm.
- Press [∗] to confirm the deletion of all the keys, then press [#] to quit.



3.7 IDENTIFYING THE SYSTEM

If you are planning to use a key for several systems of the same type, you need to change the system ID, using function SYSTEM ID, in order to change the memory location there the selected system code is stored on the key.

To perform this operation, follow this procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press [↵] to confirm.
- Use keys [↑] and [↓] to select SYSTEM ID and press [↵] to confirm.
- Press [DEL] followed by a numerical key from 0 to 7 to indicate the system ID number.
- Press [↵] to confirm.

Please note: if the programmed keys are used for AMC systems other than series S or C, you will not need to change parameter SYSTEM ID. Please remember that “Beatle” keys can be used to manage a maximum of 2 systems (that is two different SYSTEM IDs).

3.8 ENABLING THE BUZZER ON KEYPADS AND PLUGS

Every keypad and plug has a BUZZER that provides an acoustic warning for the quit time, the entry time and other features. To enable or disable the buzzer, follow this procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press [↵] to confirm.
- Use keys [↑] and [↓] to select KEYPADS SOUND or PLUGS SOUND and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the desired keypad or plug.
- Press DEL to enable or disable the sound of the keypad or plug:

  □ = Sound enabled
  • = Sound disabled

- Press ↵ to confirm

3.9 ENABLING INPUT EXPANSION MODULES

Before performing any programming operation, you need to set the address of the expansion modules using the DIP – SWITCHES, as described in paragraph 1.4 – EXPANDING INPUTS.

To enable one or more input expansion modules, perform the following procedure:

- Enter the technician code to open the Technical Menu and press ↵ to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press ↵ to confirm.
- Use keys [↑] and [↓] to select REMOTE INPUTS and press ↵ to confirm.
- Press [DEL] to enable or disable the expansion module (Enabled=□ Disabled=•)
- Press [↵] to confirm.

Note: pay attention not to enable expansion modules that don't exist, otherwise the system will issue a PERIPHERAL tamper warning. Warnings related to the tampering of expansion modules display as PERIPHERAL TAMPER 33.

3.10 ENABLING AN OUTPUT EXPANSION MODULE

Before performing any programming operation, you need to set the address of the expansion modules using the DIP – SWITCHES, as described in paragraph 1.5 – EXPANDING OUTPUTS.

To enable one or more output expansion modules, perform the following procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press [↵] to confirm.
- Use keys [↑] and [↓] to select REMOTE OUTPUTS and press ↵ to confirm.
- Press [DEL] to enable or disable the output expansion module (Enabled=□ Disabled=•)
- Press [↵] to confirm.

Note: pay attention not to enable expansion modules that don't exist, otherwise the system will issue a PERIPHERAL tamper warning. Warnings related to the tampering of output expansion modules display as PERIPHERAL TAMPER 25.

3.11 ENABLING AN EXPR/S RADIO EXPANSION MODULE

Before proceeding to the device's set up it's necessary to assign it an address trough the relative HWADR DIPs, as described in paragraph 1.6 – EXPR/S RADIO EXPANSION.

To enable one or more EXPR/S Radio Expansions please follow the procedure below:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press [↵] to confirm.
- Use keys [↑] and [↓] to select EXPRS EXPANSIONS and press [↵] to confirm.

- Use keys [↑] and [↓] to select ENABLING and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the expansion module you wish to enable, shown in the row above.
- Press [DEL] to enable or disable the EXPR/S radio expansion module (Enabled=□ Disabled=•)
- Press [↵] to confirm.

Note: pay attention not to enable expansion modules that don't exist, otherwise the system will issue a PERIPHERAL tamper warning. Warnings related to the tampering of EXPR/S radio expansion modules display as PERIPHERAL TAMPER 65…67.

3.12 NETWORK SPEED

You can set a different speed on the transmission of data on the BUS. Default Value " 0 ". When you notice a slowdown in response time during programming by keyboards (caused by wiring of the bus " old " or not connected in cascade), you can increase the data rate, bringing the parameter to 1 or 2 .

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select PERIPHERALS and press [↵] to confirm.
- Use keys [↑] and [↓] to select NETWORK SPEED and press [↵] to confirm.

Insert 1 or 2 (CANCEL button (X) to erase the previous value). Confirm with enter key (√).

3.13 ENABLING AND DISABLING RADIO DEVICES

To Enable or Disable one or more Radio Devices, please follow the procedure described below:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select INPUT and press [↵] to confirm.
- Use keys [↑] and [↓] to select RADIO RECEIVER and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired RECEIVER (LOCAL, 02, 03) and press [↵] to confirm.
- Use keys [↑] and [↓] to select DEVICE ENABLE and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the device you wish to enable, shown in the row above.
- Press [DEL] to enable or disable the device (Enabled=□ Disabled=•)
- Press [↵] to confirm.

3.13.1 LEARNING A NEW RADIO DEVICE

Before using a new radio device with the panel it's necessary to let it learn from an expansion by following the procedure described below:

- Turn ON the DIP1 FUNCTIONS on K-RADIO or on the EXPR/S where the device has been enabled
  ⇒ The red LED on the K-Radio or on the EXPR/S must stay turned off
- Send the selected Learnig Signal from the desired radio device (see below)
  ⇒ The red LED will turn on for 1 second indicating the operation has been completed successfully
- Repeat the operation to learn the other devices already enabled
  ⇒ After the last enabled device has been learned the red LED on the EXPR/S will start blinking fast
- Return OFF the DIP1.

3.13.2 DELETING RADIO DEVICES

To delete a radio device, follow the procedure below:

- Disable the device from its expansion referring to paragraph 3.11
- Switch ON the DIP1 (on K-Radio or on EXPR/S) until the red LED starts blinking fast
- Switch back OFF the DIP1

3.13.3 CHANGING A RADIO DEVICE

If necessary it's possible to substitute any radio device with a similar one, mantaining the same configuration, but only if the two devices are equivalent.

To substitute a radio device, follow the procedure below:

- Disable the device from its expansion (refer to paragraph 3.11)
- Turn ON the DIP1 (on K-Radio or on EXPR/S) until the red LED will start blinking fast
- Turn back OFF the DIP1
- Enable again the device on its expansion (always referring to paragraph 3.11)
- Turn ON the DIP1 of the expansion where the device has been enabled
  ⇒ The red LED must remain turned OFF.
- Send the selected Learnig Signal from the desired radio device
  ⇒ The red LED will turn ON for 1 second indicating that has been correctly learnt
- Switch back OFF the DIP1

3.14 MEANING OF SIGNALLING LED OF THE SECTION RADIO (INSIDE THE K-RADIO or EXPR/S)

	GREEN LED (RADIO SECTION STATUS)	**RED LED** (DEVICE STATUS)
OFF	The expansion is out of Order or not Supplied	Normal functioning
ON	Communication problems (A and B terminals connection wrong)	(Flash) New device learnt
SLOW BLINKING	/	At least a device cover is open
FAST BLINKING	Communicating but not yet enabled	Device's storing completed
FLASHING	Normal functioning (in use)	At least one supervision missed

3.15 MEANING OF THE MULTICOLOR LED (OUTSIDE THE EXPR/S or INSIDE THE K-RADIO)

The external multicolor LED shown the correct reception of the device's radio signals. During each reception it will turn on for 1 second, the color will indicate the signal strength referring the following values:

Green – Signal Excellent
Yellow – Signal Sufficient
Red – Signal Poor

3.16 LINKING THE RADIO INPUTS TO THE WIRED INPUTS

To let the panel correctly manage the radio zones you first must link them to the wired zones. Once done, will be possible to assign them the Area and configure the other parameters of the zone, like a normal wired zone, trough the ZONES MENU.

Procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select MENU INPUT and press [↵] to confirm.
- Use keys [↑] and [↓] to select RADIO RECEIVER and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired RECEIVER (LOCAL, 02, 03) and press [↵] to confirm.
- Use keys [↑] and [↓] to select DEVICES and press [↵] to confirm.
- Use keys [↑] and [↓] to select the device you wish to configure and press [↵] to confirm
- Use keys [↑] and [↓] to select the input of the device you wish to assign (es. IN.01 → Panel) and press [↵] to confirm.
- Use the numerical pad to define the wired zone you wish to associate to the selected radio input (from 1 to 48).
- Press [↵] to confirm.

3.17 RSSI LEVEL (RECEIVED RADIO SIGNAL STRENGTH) and BATTERY LEVEL

It's possible to directly view the radio device's received signal level from the K-LCD display. This feature allows to periodically monitor the correct radio link between the device and its receiver.

Legend: **.**□□□ - Excellent Signal

. . .□ - Poor Signal

It's possible to directly view the radio device's battery charge level from the K-LCD display. This feature allows to periodically monitor the battery charge level of the any radio device.

Legend: .□□□□□□□□□□ - Battery Level Ok

. . . . . .□□ - Battery Level Low

Procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select MENU INPUT and press [↵] to confirm.
- Use keys [↑] and [↓] to select RADIO RECEIVER and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired RECEIVER (LOCAL, 02, 03) and press [↵] to confirm.
- Use keys [↑] and [↓] to select DEVICES and press [↵] to confirm.
- Use keys [↑] and [↓] to select the device you wish to control and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired parameter → BATTERY LEVEL or → RSSI LEVEL and press [↵] to confirm.
- Press Enter [↵] and then # to exit.

3.18 DEVICE NAME

For each device it's possible to modify its name. The maximum length allowed is 16 digits.

Procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select MENU INPUT and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired RECEIVER (LOCAL, 02, 03) and press [↵] to confirm.
- Use keys [↑] and [↓] to select DEVICES and press [↵] to confirm.
- Use keys [↑] and [↓] to select the device you wish to configure and press [↵] to confirm
- Use keys [↑] and [↓] to select DEVICE NAME and press [↵] to confirm
- In the upper row will appear the number and the name of the device, in the lower row will be shown the default name and the cursor will blink in the first position.
- Use the alphanumerical keypad to change the character and keys [←] and [→] to move the blinking cursor to the left or right. Press [DEL] to delete a character or enter a blank space between two characters.
- Press [↵] to confirm.

4. SETTING THE ZONES

After the initial reset, the settings of each zone will be the following:

- AREA = 0 (**only** the zones from 1 to 8 are enabled in Area 1)
- FUNCTION = 0 (zone configured with an immediate function)
- TYPE = 0 (zone configured as normally closed)

To configure one or more zones differently, refer to the instructions provided in the following sections.

4.1 ENABLING ZONES (Zones Area)

To enable or disable one or more zones, follow this procedure:

- Enter the user code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Select ZONES AREA and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor by one position at a time or keys ↑ and ↓ to move it by 8 positions at a time and select the zone you wish to enable or disable.
- Enter 1 or 2 to assign the selected zone to one or more areas.
- To display all the areas to which a specific zone is assigned, press 0 several times.
- After enabling all the zones necessary, press the Enter key [↵] to confirm.

For information on the enabling and assignment of zones, refer to the following:

. = Zone disabled
- = Zone enabled and assigned to at least one area
1 = Zone enabled and assigned to Area 1

2 = Zone enabled and assigned to Area 2

Note:

- **DO NOT enable zones that you are not planning to use.**
- **The enabling of wired inputs from 41 to 48 is always dependant on the enabling of the input expansion module, as explained in the introductory section of this chapter.**

4.2 PROGRAMMING THE ZONES FUNCTION

To set the function of one or more zones, follow this procedure:

- Enter the technician code to open the Technical Menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONES FUNCTION and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor by one position at a time or keys [↑] and [↓] to move it by 8 positions at a time and select the zone you wish to change.
- Enter a number from 1 to 9 or a letter between A and B to set the desired function (see description below).

Note: For the letter A, type 2 times 0, for the letter B, type twice any other number.

The section that follows lists all the functions along with the corresponding description:

0 = Immediate: alarm function with no delay.

1 = Lagged: alarm function with lagged response time, programmable from 1 second to 15 minutes.

2 = Counter: enables the alarm after the number of violations specified in parameter PULSE COUNTER in the OTHER PARAMETERS Menu. The counter is reset 1 minute after the last violation.

3 = Smart: "immediate" function, which becomes automatically lagged when a lagged input enables. You can use this function to define a "route" from a (lagged) zone to the peripheral in order to be able to exclude the system (using a keypad or plug).

4 = 24 hours: enables the alarm 24 hours a day, regardless of the system status (armed/excluded).

5 = Switch Alarm (fast inputs): normally closed alarms with a very high pulse count. They are used to protect shutters or vibrating systems. The system can assign this function only to the last 2 inputs of the input expansion (47-48). **When an input is configured with this function, the system automatically configures it as N.C. The sensitivity of the sensor can be adjusted with parameter PULSE COUNTER in the OTHER PARAMETERS Menu.**

6 = Chime: when the system is off, it produces a 10 second acoustic sound for the keypad or for the enabling of a programmed output. When the system is armed, the function enables immediately, producing an alarm if violated. You can disable the sound of the keypad or output with the following shortcut command: **#331#=Disable, #231#Re-enable.**

7 = Tecno: this input is used for technological type of alarms. Together with the telephone controller, it can be used as silent alarm or to signal technical events by phone (VOCAL OR DIGITAL). You can also assign a programmable output and use it to automatically operate other equipment. This is a 24 hour input and is therefore always active, regardless of the status of the system.

8 = System ON/OFF: it enables to manage any program set by means of a pulsed command. The operating logic depends on the input configuration (N.C. or N.O.). **It is not possible to use this function with stable commands.** To assign the number of the program to arm (PROGRAM 1..8), see Menu QUICK ARM BY INPUTS,

9 = Duress (with siren): it is used to enable a panic alarm with siren. The operating logic depends on its configuration (N.C. or N.O.). It is a 24 hour input and is therefore always active regardless of the system status (armed/excluded). It can be used to enable a call to the controller, enable a assigned output or even to send digital alarms (ID CONTACT).

A = Silent Duress: it is used to enable a silent panic alarm (without siren) The operating logic depends on its configuration (N.C. or N.O.). It is a 24 hour input and is therefore always active regardless of the system status (armed/excluded). It can be used to enable a call to the controller, enable a assigned output or even to send digital alarms (ID CONTACT).

B = Fire: it enables an output assigned to the "Fire" function. It displays the fire event, but does not enable the alarm siren. It is a 24 hour input that is therefore always active, regardless of the status of the system.

C = Only ON: same as function 8, it allows only to arm the system.

D = Only OFF: same as function 8, it allows only to disarm the system.

4.3 SETTING THE TYPE OF ZONE (Zones type – Tamper zone type)

This parameter can be used to determine the operating mode of a sensor (N.C., N.O., Balanced, Filtered).
Parameter TAMPER ZONES TYPE can be used to determine the type of tamper terminal, which is identical to that of a standard sensor (see following table).
Always remember to enable the area tampers through the OTHER PARAMETERS Menu**.**

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONES TYPE and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the zone you wish to change by one position at a time or use keys [↑] and [↓] to move the blinking cursor by 8 positions at time.
- Enter a number from 0 to 3 to assign a TYPE to the zone.
- After defining the TYPE of zones, press [↵] to confirm all your settings.

0. **N.C. zone (normally closed)**
1. **N.O. zone (normally open)**
2. **Filtered zone (normally closed, higher immunity to noise)**
3. **Double balanced N.C. zone (with 24h/24 protection from disconnection and the short-.circuit of harness)**
4. **Disabled tamper zone (this parameter is valid only for the system terminal and tamper spring)**

Note: in order to prevent ZONE TAMPER alarms, it is necessary to ensure that all double balanced zones are connected to resistive loads, as shown in the diagram.

4.4 CHECKING THE STATUS OF ZONES

A synoptic panel, which displays the status of all assigned zones, has been provided in order to simplify the control of the system.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONES STATUS and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the zone you wish to control, scanning one position at a time, or alternatively use keys [↑] and [↓] to move the blinking cursor by 8 positions at time.
- The upper row of the screen displays the zones being examined.
- The lower row of the screen shows the open (□) and closed (•) zones.
- Press ↵ to exit.

4.5 ARMING LOCK

If the system is armed using a remote plug or an ON/OFF input, you can define any number of zones that lock arming when "opened".

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select ARMING LOCK and press [↵] to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the selected zone by one position at a time or use keys [↑] and [↓] to move the blinking cursor by 8 positions at time.
- After selecting the desired zone, press DEL to include it or exclude in/from the arming control.

□ = Zone that locks remote arming if open
• = Non locking zone

- Press ↵ to confirm.

4.6 ASSIGNING A PROGRAM TO AN ON / OFF INPUT (ARMING BY ZONES)

This feature enables you to assign an ON/OFF input to any program (PROGRAM 1, PROGRAM 2, etc.), so that the unbalancing of the input assigned to a program causes the enabling or disabling of the program itself.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press ↵ to confirm.
- Use keys [↑] and [↓] to select ARMING BY ZONES and press ↵ to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the zone you wish to change by one position at a time or use keys [↑] and [↓] to move the blinking cursor by 8 positions at time.
- Enter a number from 0 to 8 to assign a PROGRAM to the zone.
- Press ↵ to confirm.

0. **Not assigned**
1. **PROGRAM 1**
2. **PROGRAM 2**
3. **PROGRAM 3**
4. **PROGRAM 4**
5. **PROGRAM 5**
6. **PROGRAM 6**
7. **PROGRAM 7**
8. **PROGRAM 8**
9. **ALL PROGRAMS**

ATTENTION: you can assign one program only to each zone. If you wish to arm ALL the PROGRAMS, you need to assign 9 "ALL PROGRAMS"

4.7 SELF EXCLUSION (REMOTE EXCLUSION)

If the system is armed using a remote plug or an ON/OFF input, you can define any number of zones that lock that automatically exclude themselves from the system when "opened".

Procedure:

- Open the TECHNICIAN Menu.
- Use keys ↑ and ↓ to select ZONES MENU and press ↵ to confirm.
- Use keys ↑ and ↓ to select SELF EXCLUSION and press ↵ to confirm.
- Use keys [*] and [#] to move the blinking cursor to the position that corresponds to the selected zone by one position at a time or use keys ↑ and ↓ to move the blinking cursor by 8 positions at time.
- After selecting the desired zone, press DEL to include it or exclude it at the time of arming.

  □ = Zone that excludes itself automatically at the time of arming when open
  • = Zone that is always armed

- Press ↵ to confirm.

4.8 ASSIGNING AN OUTPUT TO A ZONE (ZONE → OUTPUT)

You can assign an output to a zone so that the output enables when the corresponding zone is violated/enabled. You can even assign one output to several zones.
The condition that determines the enabling or disabling of the output (with armed or excluded system, etc..) is determined by the programming parameters of the output that are described in other sections of this manual.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONE → OUTPUT and press [↵] to confirm.

- Press [↵] once more to open the corresponding menu.
- Use keys [↑] and [↓] to select the zones (from 1 to 48). To quickly select a zone, press [*] and enter the number of the desired zone.
- After selecting the desired zone, press [↵] to confirm. When the lower row of the screen displays a blinking 0, enter the number of the output you wish to assign to the zone (from 1 to 6).
- Press [↵] to confirm.

Note: to ensure that the output enables when the corresponding zone is enabled, you need to program the output as TECNO (see the paragraph related to outputs).

4.9 ASSIGNING A NAME TO A ZONE

You can change the default NAME assigned to each zone (ZONE 1, ZONE 2, etc.) by entering a new name with a maximum length of 16 characters.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONES NAME and press [↵] to confirm.
- To quickly select a zone, use keys [↑] and [↓] to browse the zones, or press key [*] and enter the number of the desired zone.
- After selecting the desired zone, press [↵] to confirm. The upper row of the screen displays the number and name of the zone, while the lower one shows the default name of the zone that has to be changed, with the cursor blinking on the first character.
- Use the alphanumerical keypad to change the character and keys [←] and [→] to move the blinking cursor to the left or right. Use key [DEL] to delete a character or enter a blank space between two characters.
- Press [↵] to confirm.

4.10 ZONES DELAY

It is possible to assign to each LAGGED zone of the system a time ranging from 1 second to 15 minutes.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press ↵ to confirm.
- Use keys [↑] and [↓] to select ZONES DELAY and press ↵ to confirm.
- To quickly select a zone, use keys [↑] and [↓] to browse the zones, or press key [*] and enter the number of the desired zone.
- After selecting the desired zone, press [↵] to confirm. The upper row of the screen displays the number and name of the zone, while the lower one shows the time to set (which can range from 1s to 15 min.)
- Use the numerical keys to change the time or press [DEL] to reset or cancel it.
- Press [↵] to confirm.

4.11 AND GROUPS

The system also has 8 AND groups that can be configured by the user and assigned to several zones. When the system is armed, it will detect an alarm condition if two zones of the group enable within the time window set in parameter AND GROUPS TIME, which is available in the same menu.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select AND GROUPS and press [↵] to confirm.
- Use keys [*] and [#] to browse the desired zones one at a time or use keys [↑] and [↓] to browse them by 8 zones at a time.

- After selecting the desired zone, press a numerical key to assign it to the desired AND group. The upper row of the screen displays the number and name of the zone, while the lower one shows the number of the group to which it is being assigned (from 0 to 8).
- Press [↵] to confirm.

0	**No AND group assigned**
1	**First AND group**
2	**Second AND group**
3	**Third AND group**
4	**Fourth AND group**
5	**Fifth AND group**
6	**Sixth AND group**
7	**Seventh AND group**
8	**Eighth AND group**

Note: you can assign one zone only to a single AND group.

4.12 AND GROUP TIME

You can assign to each group a time during which two AND inputs must enable for an alarm to be issued.
The time window can be set to any value ranging from 2 seconds to 15 minutes.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select AND GROUPS TIME and press [↵] to confirm.
- Use keys [↑] and [↓] to select the time for the selected group.
- Press once more [↵].
- Use the numerical keys to set the desired time (from 2 seconds to 15 minutes) or press DEL to delete the existing settings.
- Press [↵] to confirm.

NOTE: With time equal to " 0.00 " box is still time for the opening of 2 seconds.

5. OUTPUTS

The R serie control unit has 3 on-board OPEN COLLECTOR outputs along with other optional outputs on the remote expansion modules, for a total of 6 outputs.
OPEN COLLECTOR outputs are electronic outputs managed by a transistor that have supply a maximum power of 100 mA. Therefore, if they are use to pilot loads with a higher consumption, it is necessary to interface them with a low consumption 12V relay. Each of the outputs can be programmed freely. The following table lists all the parameters required for a correct operation.

5.1 PROGRAMMING THE OUTPUTS FUNCTION

The first programming step consists in determining the function that has to be assigned to the output. The following table lists the type of function that can be assigned to each output and along with the programming procedure.

0	**BS/CH (SYSTEM STATUS)**	Enabled when the system is armed; disabled when the system is excluded.
1	**No AC**	Enabled when the mains voltage is not present; disabled when it is present.
2	**AC return**	Enabled by pulses when power is resumed.
3	**Low battery**	Enabled when a battery low condition is detected; disabled when the battery is fully charged.
4	**Panic**	Enabled when a panic alarm occurs (that is when keys [*] and [#] are simultaneously pressed on the keypad) by a panic zone enabling or an anti-aggression alarm (user code with the last digit increased). **ATTENTION: it is always necessary to specify a duration.**
5	**Tecno**	Dependant on the behaviour of one or more assigned zones. It is enabled by

		pulses when the assigned user code is entered. **It is always necessary to specify a duration.**
6	**No telephone line**	Enabled when a fault is detected on the telephone line; disabled when the telephone line is working normally.
7	**Siren**	Dependant on the system alarm status.
8	**Pre-alarm**	Enabled during the arming time.
9	**Arming**	Enabled during the quit time.
A	**Chime (Bell)**	Dependant on the assigned chime input.
B	**Fire Alarm**	Fire alarm output generated by one or more fire zones; disabled after a FIRE RESET command (option of the Users Menu).
C	**Fire Reset**	Enabled when a FIRE RESET command is issued (option of the Users Menu).
D	**Pilot**	Enabled/disabled by a shortcut key or by a remote command issued by the telephone (DTMF)
E	**Control LED**	Dependant on the behaviour of the green control LED on the keypad.
F	**Battery of expansions**	Low battery of wireless devices
G	**Supervision of expansions**	Missing supervision of wireless devices
H	**Saturation of expansions**	Radio signal saturation
I	**No GSM**	Problems with GSM registration

To select the numbers and letters to assign as functions, use the numerical keys (see paragraph 2.5).
Note: for all functions that cannot be disabled (function 2, 4, 5 assigned to a user, C), remember to set the OUTPUTS DURATION parameter, because these are pulsed outputs with reset.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select OUTPUTS FUNCTION and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired outputs.
- After selecting the output, press a numerical key to assign a function. The upper row of the screen displays the output number and name, while the lower row shows the number assigned to the assigned function.
- Repeat the operation for the remaining outputs and press [↵] to confirm.

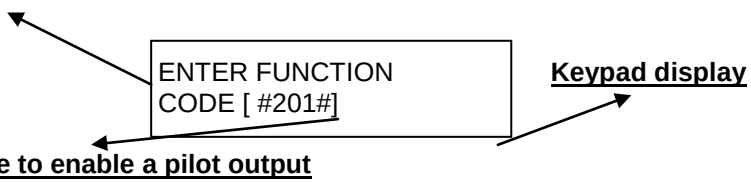
5.2 QUICK COMMANDS FOR PILOT OUTPUTS

Press # to open the PILOT OUTPUTS Menu. Enter 2 to ENABLE or 3 to DISABLE. Type the desired number of output (01, 02, ….30). Press once # to confirm.

Enter	**#201#**	**To enable output 1**
Enter	**#202#**	**To enable output 2**
Enter	**#203#**	**To enable output 3**
Enter	**#231#**	**To enable the chime output**

Enter	**#301#**	**To disable output 1**
Enter	**#302#**	**To disable output 2**
Enter	**#303#**	**To disable output 3**
Enter	**#331#**	**To disable the chime ouput**

Quick output programming menu



Use the keys shown above to enable a pilot output

Use key [∨] to view the enabled pilot output.

Remember that you can assign a name to each output (max. 16 character) so that they display with a unique name.

5.3 OUTPUTS POLARITY

You can specify a different polarity for each disabled output, depending on needs (N.C. or N.O.).
Remember that N.C. represents a circuit closed towards the ground, while N.O. is an open circuit.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select OUTPUTS POLARITY and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired outputs.
- After selecting the output, press [DEL] to assign the polarity **(● = N.O. □ = N.C.)** The upper row of the screen displays the output number and name, while the lower row shows the function to assign.
- Repeat the operation for the remaining outputs and press [↵] to confirm.

5.4 OUTPUTS TYPE

This parameter can be used to specify the type of outputs:

0 = **IMPULSIVE AUTO RESET**, enables for the programmed time (parameter “outputs duration”). if a delay has been set (parameter "outputs delay”) and the triggering event ceases before the expiry of the set interval of time, the operation does not occur.

1 = **IMPULSIVE NO RESET**, enables for the set interval of time (parameter “outputs duration”). if it configured with a delay (parameter "outputs delay”) and the triggering event ceases before the expiry of the set interval of time, the operation is still performed.

Note: to obtain a stable output (that follows the trend of the event), enter 0 for parameter OUTPUTS DURATION.

Note: the output TYPE will be automatically forced to 1 for all outputs that do not have a disabling event (function 2, 4, 5 assigned to a user).

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select OUTPUTS TYPE and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired outputs.
- After selecting the output, press a numerical key to assign the type. The upper row of the screen displays the output number and name, while the lower one displays the number assigned to the type you wish to assign.
- Repeat the operation for the remaining outputs and press [↵] to confirm.

5.5 OUTPUTS AREA

To enable an output, you need to assign it to one or more areas of the system:

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select OUTPUTS AREA and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired outputs.
- After selecting the desired output, press the numerical key that corresponds to the desired area. To assign one output to several areas, press in sequence the numerical keys that correspond to the desired areas.
- To display the outputs assigned to the areas, press 0. The program cyclically moves from one area to the next displaying the outputs assigned to each area. The upper row of the screen displays the output number and name, while the lower row shows the number assigned to the assigned area.
- Repeat the operation for the remaining outputs and press [↵] to confirm.

Caption:

- • = Output disabled
- - = Output enabled and assigned to at least one area
- x = Output assigned to area x (where x can be 1 or 2)

5.6 OUTPUTS DELAY

You can assign to each output a different delay for the interval of time between the occurrence of the event and the enabling time (from 1 m to 240 hours).
To ensure that the output immediately enables when the event occurs, leave the parameter set to 0.00.

Note: note that a lagged output with an IMPULSIVE AUTORESET setting will never enable if the delay is above the reset time programmed for the triggering event.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select OUTPUTS DELAY and press [↵] to confirm .
- To quickly select an output, use keys [↑] and [↓] to browse the outputs.
- After selecting the desired output, press [↵] to confirm. The upper row of the screen displays the output name, while the lower one shows the time to set (which can range from 1 min to 240 hours).
- Use the numerical keys to change the time or press [DEL] to reset or cancel it.
- Press [↵] to confirm.

5.7 OUTPUTS DURATION

This parameter can be used to specify the duration in time of the enabling of an output, which means that it is possible to program an impulse of one hour. You can set a value ranging from a minimum of 5 seconds to a maximum of 10 hours.
As time is expressed in seconds, 10 hours will display as 599:59 seconds.

Note: if you assign to this function a value of 0 seconds, the output becomes stable and follows therefore the behaviour of the peripheral to which it is assigned (zones, No AC, etc.)

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press ↵ to confirm.
- Use keys [↑] and [↓] to select OUTPUTS DURATION and press ↵ to confirm .
- To quickly select an output, use keys [↑] and [↓] to browse the outputs.
- After selecting the desired output, press [↵] to confirm. The upper row of the screen displays the output name, while the lower one shows the time to set (which can range from 0 seconds to 10 hours).
- Use the numerical keys to change the time or press [DEL] to reset or cancel it.
- Press [↵] to confirm.

5.8 LINKED INPUTS

You can assign a zone to several outputs so that when the selected zone opens and/or closes, all the assigned outputs enable. The delay and duration have to be programmed for each single output.

Note: outputs assigned to a zone must be configured as TECNO (function 5). It is also possible to assign the same output to other inputs using parameter ZONE → OUTPUT in the INPUTS Menu.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select LINKED INPUTS and press [↵] to confirm.
- To quickly select an output, use keys [↑] and [↓] to browse the outputs.
- After selecting the desired output, press [↵] to confirm. The upper row of the screen displays the output name, while the lower row shows the number of the input to assign.
- Use the numerical keys to select the input or press [DEL] to reset or cancel the operation.

➢ Press [↵] to confirm.

5.9 SYSTEM STATUS / OUTPUTS

You can subordinate the operation of an output to the operating status of the system (armed, excluded, always, etc.).

0	Output ALWAYS ACTIVE
1	Program 1 (the output enables only when Program 1 is armed)
2	Program 2 (the output enables only when Program 2 is armed)
3	Program 3 (the output enables only when Program 3 is armed)
4	Program 4 (the output enables only when Program 4 is armed)
5	Program 5 (the output enables only when Program 5 is armed)
6	Program 6 (the output enables only when Program 6 is armed)
7	Program 7 (the output enables only when Program 7 is armed)
8	Program 8 (the output enables only when Program 8 is armed)
9	System OFF only (the output enables only when the system is excluded)
A	System ON only (the output enables when the system is excluded, regardless of the programs)

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press ↵ to confirm.
- Use keys [↑] and [↓] to select SYS STATUS/OUT and press ↵ to confirm.
- Use keys [←] and [→] to browse the desired outputs.
- After selecting the output, press a numerical key to assign a configuration. The upper row of the screen displays the output number and name, while the lower row shows the number assigned to the operating condition.
- Repeat the operation for the remaining outputs and press [↵] to confirm.

5.10 ASSIGNING A NAME TO AN OUTPUT

You can change the default NAME assigned to each output (OUTPUT 1, OUTPUT 2, etc.) by entering a new name with a maximum length of 16 characters.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OUTPUTS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select OUTPUTS NAME and press [↵] to confirm.
- To quickly select an output, use keys [↑] and [↓] to browse the outputs.
- After selecting the desired output, press [↵] to confirm. The upper row of the screen displays the output number and name, while the lower one shows the default output name that has to be changed, with the cursor blinking on the first character.
- Use the alphanumerical keypad to change the character and keys [←] and [→] to move the blinking cursor to the left or right. Use key [DEL] to delete a character or enter a blank space between two characters. Press [↵] to confirm.

6. USERS (TECHNICAL PROGRAMMING)

6.1 ENABLING A USER (USERS AREA)

Systems series S have 2 completely separated areas and enable therefore users to be assigned to one or more areas. This means that it is possible to allow a user to access specific areas and prevent another user from accessing it.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select USERS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select USERS AREA and press [↵] to confirm.

- Use keys [←] and [→] to browse the desired users (from 1 to 64) one at a time or keys [↑] and [↓] to browse them by 8 users at a time.
- After selecting the desired user, press the numerical key that corresponds to the desired area. To allow one specific user to access several areas, press the numerical keys that correspond to the desired areas in sequence.
- To display the areas assigned to the users, press 0. The program cyclically moves from one area to the next displaying the users assigned to each area. The upper row of the screen displays the user number and name, while the lower row shows the number assigned to the assigned area.
- Repeat the operation for the remaining users and press [↵] to confirm.

Caption:

- = Disabled user
- = User enabled and assigned to at least one area
X = Output enabled to access Area X (where X can be 1 or 2)

6.2 USERS LEVEL

You can assign users a priority level so that they can access the system using different modes.

0 = Master: this user can perform all the operations of the Users Menu without limitations

1 = Slave A: the code of this user does NOT enable him to perform operations related to the status of the system, but only disable, **when the system is armed**, a specific number of zones to which he has been assigned.

2 = Slave B: the code of this user does NOT enable him to perform operations related to the status of the system, but only disable, **when the system is armed**, a specific number of zones to which he has been assigned.

3 = Administrator: this user can only change all the system user codes, but not arm the system or perform other operations.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and ↓ to select USERS MENU and press [↵] to confirm.
- Use keys [↑] and ↓ to select USERS LEVEL and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired users one at a time or keys [↑] and [↓] to browse them by 8 users at a time.
- After selecting the desired user, press a numerical key to assign the user level. The upper row of the screen displays the user number and name, while the lower one displays the number assigned to the level to assign.
- Repeat the operation for the remaining users and press [↵] to confirm.

MASTER USERS CAN PERFORM THE FOLLOWING OPERATIONS:

- ARM THE WHOLE SYSTEM OR PART OF IT
- READ EVENTS
- CHANGE THEIR NAMES
- CHANGE THEIR CODES
- CHANGE THE DATE AND TIME
- PROGRAM THEIR KEYS
- REQUEST REMOTE ASSISTANCE
- RESET A FIRE ALARM
- ENABLE REMOTE MANAGEMENT

SLAVE USERS CAN PERFORM THE FOLLOWING OPERATIONS:

- ARM OR EXCLUDE A ROUTE OF AN ARMED SYSTEM
- CHANGE THEIR CODES
- CHANGE THEIR NAMES

Note: it is also possible to allow slave users to arm the system if it is excluded. After the system has been armed, the user will not be able to exclude it, but will only by authorized to free the routes to which he has been assigned.

ADMINISTRATOR USERS CAN PERFORM THE FOLLOWING OPERATIONS:

- CHANGE ALL THE USERS CODE
- CHANGE THE AUTOMATIC ARMING / DISARMING TIMERS
- CHANGE THE USERS TIMERS

6.3 ASSIGNING A NAME TO A USER

You can change the default NAME assigned to each user (USER01, USER02, etc.) by entering a new name with a maximum length of 16 characters. This operation can be performed both by the technician (for all users) and by the user to whom the name belongs.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select USERS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select USERS NAME and press [↵] to confirm.
- To quickly select a user, use keys [↑] and [↓] to browse the users, or press key [*] and enter the number of the desired user.
- After selecting the desired user, press [↵] to confirm. The upper row of the screen displays the user code and name, while the lower one shows the default user name that has to be changed, with the cursor blinking on the first character.
- Use the alphanumerical keypad to change the character and keys [←] and [→] to move the blinking cursor to the left or right. Use key [DEL] to delete a character or enter a blank space between two characters. Press [↵] to confirm.

By pressing the key " * " it's possible to select directly the index of the User

6.4 ASSIGNING AN OUTPUT TO A USER

You can assign a programmable output to a user so that it enables when the user types his code typed or inserts the key. You can even assign one output to several users.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select USERS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select USERS → OUTPUTS and press [↵] to confirm.
- To quickly select a user, use keys [↑] and [↓] to browse the uses, or press key [*] and enter the number of the desired user.
- After selecting the desired user, press [↵] to confirm. When the lower row of the screen displays a blinking 0, enter the number of the output you wish to assign to the user (from 1 to 6, 0 no output associated).
- Press [↵] to confirm.

Note: an output can be associated to a user only if it has been configured as TECNO and if the duration has been specified (see the section on outputs).

6.5 USERS TIMER

You can do that a particular user is authorized to act on the system during certain hours / days. To do this follow the steps below.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select USERS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select USERS TIMER and press [↵] to confirm.
- To quickly select a user, use keys [↑] and [↓] to browse the uses, or press key [*] and enter the number of the desired user.
- Use the alphanumerical keypad to insert one of the four TIMER: 1, 2, 3, or 4, and press enter [↵]

Notes: For the programming of the 4 USER PROGRAMMABLE TIMER see Chapter 9.2

6.6 USERS → PROGRAMS

You can configure a user so that he is enabled to arm a specific program but not others. To do so, follow the procedure described below.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select USERS MENU and press [↵] to confirm.
- Use keys [↑] and [↓] to select USERS → PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to configure the programs and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired user and press [↵] to confirm. It's possible to press key [*] and enter the number of the desired user.
- Use keys [←] and [→] to select the desired program, then press [DEL] to enable or disable the selected program.
- Press [↵] to confirm.

6.7 ENTERING A NEW USER CODE

The system is able to manage 64 USERS codes. If you have reset the system, only USER code 1 is available, which has the following number: 111111.
After enabling a new user and linking him to his area, you can create the numerical code directly from the TECHNICIAN Menu.

NOTE: the user can then change their numerical code by following the instructions provided in paragraph CHANGING A USER CODE of the Users Menu section.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select USERS MENU and press [↵] to confirm.
- Press [↓] or [↑] several times in order to select USERS CODE.
- At this point, you will be able to enter additional codes for a new USER. Use keys [↑] and [↓] to display the selected user and press [↵] to confirm.
- After finding and selecting the desired user, type his CODE and press [↵] to confirm.

ATTENTION: if you forget a code, you cannot resume it and will have to reset the system to its default settings (DEFAULT RESET).

In the " USERS CODE " menu if you press the [*] button you access the Shortcut menu: type the number of the desired user (from 1 to 64) and confirm with (√)

7. PARTIAL PROGRAMS AND SLAVE

The system manages, for each of the 2 areas, 8 arming programs and 2 SLAVE programs, which can be freely associated to each zone.
An arming program can be used to arm the system by directly excluding some zones and enabling others (for example: Entrance, Dining-room, Kitchen or Perimetral and Volumetric, etc.).
Each arming program can be arm directly from all keypads and plugs. For information on how to use the programs, see section ARMING THE SYSTEM.

A SLAVE program allow to disable, after the system has been armed, assigned zones in order to free a specific path (for example for cleaners, surveillance personnel, etc.).
The type of a SLAVE CODE will be notified by the " USER ENTRY " event and the flashing yellow LED on the keyboard (and plugs) for a few seconds.

NOTE: one zone can be present in several programs.
NOTE: it's possible to enable a SLAVE program in manual mode and re-arm it in AUTOMATIC mode with a settable time.

7.1 SETTINGS ARMING PROGRAMS

Procedure:

- Enter the technician code to open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to create the program and press [↵] to confirm.
- Use keys [↑] and [↓] to select the program you wish to set (from 1 to 8) and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired zones one at a time or use keys [↑] and [↓] to browse them by 8 zones at a time.
- After selecting the desired zone, press [DEL] to include it or exclude it/from the program.

□ = Zone included (enabled for the program)
• = Zone excluded (disabled for the program)

After changing all the desired zones, press [↵] to confirm.

7.2 SLAVE A or B ZONE

SLAVE zones are sets of zones that can be used by a SLAVE users only (as described in section Users). Therefore, they can be used only when the system is armed to free a specific route (for example to allow some zones to be inspected by surveillance personnel, etc.)

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to create the slave zone and press [↵] to confirm.
- Use keys [↑] and [↓] to select SLAVE A or B ZONES and press [↵] to confirm.
- Use keys [←] and [→] to browse the desired zones one at a time or use keys [↑] and [↓] to browse them by 8 zones at a time.
- After selecting the desired zone, press [DEL] to include it or exclude it/from the program.

□ = Zone included in the route (disabled by SLAVE)
• = Zone excluded by the route (always active)

- After changing all the desired zones, press [↵] to confirm.

Note: Be sure to define on which partial programs can act the Slave user (see paragraph USERS → PROGRAMS). Event " USER ENTRY " (generated after correct typing of Slave Code) will be notified by a flashing yellow LED on the keyboard for a few seconds.

7.3 SLAVE A/B TIME

It is possible to allow enabled users to configure the system to automatically rearm, within a user-defined interval of time, when a specific slave route is freed.

Note: leave the time setting 0.00 if you do not wish the system to be automatically rearmed.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to create the slave time and press [↵] to confirm.
- Use keys [↑] and [↓] to select SLAVE A or B TIME and press [↵] to confirm.
- After selecting the desired SLAVE program, press [↵] to confirm. The upper row of the screen displays the name of the program (SLAVE A or SLAVE B), while the lower one shows the time to set (which can range from 1 min to 12 hours).

Use the numerical keys to change the time, press [DEL] to reset or cancel it, then press [↵] to confirm.

7.4 ASSIGNING OUTPUTS TO PROGRAMS

You can assign an output to one or more programs. The output enables every time the program to which it is assigned arms.

Note: please remember that it is possible to assign an output to a program only if the output has been configured as TECNO (see the section on outputs).

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Use keys [↑] and [↓] to select PROG. → OUTPUTS and press [↵] to confirm.
- To quickly select a program, use keys [↑] and [↓] to browse the programs (from 1 to 8), or press key [*] and enter the number of the desired output.
- After completing the operation, press [↵]. When the lower row of the screen displays a blinking 0, enter the number of the output you wish to assign to the output.
- Press [↵] to confirm.

7.5 ASSIGNING ALARM OUTPUTS TO PROGRAMS

You can assign an alarm output to one or more programs. The output enables every time a zone assigned to a program is violated.

Note: please remember that it is possible to assign an alarm output to a program only if the output has been configured as TECNO (see the section on outputs).

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Use keys [↑] and [↓] to select PROG. → SIRENS and press [↵] to confirm.
- To quickly select a program, use keys [↑] and [↓] to browse the programs (from 1 to 8), or press key [*] and enter the number of the desired output.
- After completing the operation, press [↵]. When the lower row of the screen displays a blinking 0, enter the number of the output you wish to assign to the output.
- Press [↵] to confirm.

7.6 ASSIGNING A NAME TO A PROGRAM

You can change the default NAME assigned to each program (PROGRAM 1, PROGRAM 2, etc.) by entering a new name with a maximum length of 16 characters.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to rename the programs and press [↵] to confirm.
- Use keys [↑] and [↓] to select PROGRAMS NAME and press [↵] to confirm.
- To quickly select a program, use keys [↑] and [↓] to browse the programs (from 1 to 8), or press key [*] and enter the number of the desired program.
- After selecting the desired program, press [↵] to confirm. The upper row of the screen displays the number and name of the zone, while the lower one shows the default name of the zone that has to be changed, with the cursor blinking on the first character.
- Use the alphanumerical keypad to change the character and keys [←] and [→] to move the blinking cursor to the left or right. Press [DEL] to delete a character or enter a blank space between two characters, then press [↵] to confirm.

7.7 SLAVE ARMING

This feature enables an ordinary slave user to arm the system. If this feature is disabled, the slave user cannot arm the system, but can only disable the zones to which he is associated.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA PROGRAMS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Use keys [↑] and [↓] to select SLAVE ARMING and press [↵] to confirm.
- Enter 1 to enable the feature or press [DEL] to set 0 and disable it.

Press [↵] to confirm.

8. DATE AND TIME

8.1 SETTING THE DATE AND TIME

The date and time can be set both by the installer (through the Technician Menu) and by the user (through the Users Menu).

Procedure:

- Enter a valid code to open the menu.
- Press [↓] to select DATE/TIME, then press [↵] to confirm.
- As soon as the day of the week starts blinking, press the numerical key, from 0 to 6, that corresponds to the day of the week you wish to enter (0=Monday, 1=Tuesday, ...6= Sunday).
- Use keys [*] and [#] to move the flashing cursor to the position that corresponds to the parameter you wish to change. The sequence is: day, month, year, time and minutes. To change a parameter, delete the current setting by pressing [DEL] twice and enter the two new digits directly.
- After completing the setting operation, press [↵] to confirm.

9. TIMER

System has a weekly timer for each area, to make automatic arming and disarming and to enable user access at certain times.
It's also possible to program five periods of self-exclusion of one or more days, times when the timer settings can be temporarily disabled.

Note: During a period of automatic arming by timer, you can manually disable the system

9.1 AUTOMATIC ARMING AND DISARMING (Set Timers)

For each day of the week you can program the arming and disarming of the system in increments of 15 minutes.

Procedure:

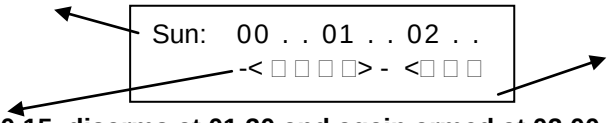
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA TIMERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Under SET TIMERS confirm with the Enter key [↵] .

- Use keys [↑] and [↓] to select the desired day of the week (for example TIMER SUNDAY) and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired time (displayed in the upper row starting from midnight). The hours are marked by two characters (eg 00) and the start time is to be considered at the 1st character.
- Use the following keys to enable entry:

  [1] = Enabling (<)
  [2] = Disabling (>)
  [0] = Cancel

- Display indications **- = System Disarmed** **□ = System Armed**

Day of the week and related 24 hours



Keypad display

The system arms at 00.15, disarms at 01.30 and again armed at 02.00

Note: if the system is manually disarmed between 00.15 and 01.30, it will rearm only after 02.00.

9.2 USERS TEMPORARY ENABLING (Users Timer)

For each day of the week you can program the access to users limited by the timer, only in specific periods. Programming can be done in steps of 15 minutes and for 4 different specific programs.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA TIMERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Under SET TIMERS use keys [↑] and [↓] to select USERS TIMER and confirm with [↵].
- Use keys [↑] and [↓] to select one of the 4 TIMER and confirm with [↵].
- Use keys [↑] and [↓] to select the desired day of the week (for example TIMER SUNDAY) and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired time (displayed in the upper row starting from midnight). The hours are marked by two characters (eg 00) and the start time is to be considered at the 1st character.
- Use the **cancel** button (X) to Enable / Disable in the corresponding time slots

Display indications **- = Disabled User** **□ = Enabled User**

Note: After setting the timers remember to associate the desired users to the number of desired timer program (Users Menu → Users Timer)

9.3 TIMER PROGRAMS

With this menu you can define which partial programs should be armed / disarmed by timer.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA TIMERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Under SET TIMERS use keys [↑] and [↓] to select TIMER PROGRAMS and confirm with [↵].

Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired partial program, and select / clear it with **cancel** button (X). Press [↵] to confirm.

9.4 EXCLUDING THE TIMER

The timer settings can be temporarily disabled by specifying a time window during which disarming times are suspended , so that the system remains armed (if it is configured to arm automatically) until the expiry of the exclusion period. This operation also prevents all the users limited by the timer from using the system.
The exclusion periods are 5 for each area and are related to the date and time set on the system.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select AREA TIMERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Use keys [↑] and [↓] to select EXCLUSION (from 1 to 5) and press [↵] to confirm.
- Enter the start day and month for the exclusion period followed by the day and month of the end exclusion period.
- Use the following keys to change the current settings:

Numerical keys : use these keys to enter a number in the current position
cancel (X) : deletes the character where the cursor is positioned
dx [〉] e sx [〈] : moves the cursor to the left and right

10. GENERAL SETTINGS (OTHER PARAMETERS)

10.1 SETTING THE SIREN TIME AND CYCLE

The siren time represents the period of time during which the alarm relay remains enabled. The default setting is 60 seconds. If the alarm condition persists after the expiry of this interval of time, the siren is suspended for a neutral period of time (15 seconds) and then restarted for the programmed period of time (if the alarm cause persist).
You can also define a maximum number of daily cycles for the siren (default 5 cycles).

NOTE: if the daily siren cycles are completed, the alarm relay is disabled until midnight of the same day (that is until the end of the day).
To prevent this from occurring it is also possible to set the siren cycles to 0, so that the siren sounds until the alarm condition persists (endless siren cycles), though this may cause disturbance.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select SIREN DURATION and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the new value (ranging from 1 sec to 5 min) and press [↵] to confirm.
- To change the maximum number of daily activations, use keys [↑] and [↓] to select SIREN CYCLES.
- Press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the new value (ranging between 1 and 20, set **0 = to set an endless number of cycles**). Press [↵] to confirm.

10.2 REMOTE SOUNDER

This parameter allows to enable the Remote Sounder (1 to enable 0 to disable).
For the learning of the Sounder refer to Its manual.

10.3 CLOCK CORRECTION

This parameter can be used to correct the clock (the minimum offset that can be corrected is ±0.02%).
If the clock is too fast, it necessary to increase the value of the parameter (if you set 60:01 for example, you remove 1 second per hour).

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select CLOCK CORRECTION and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the new value (for example 59:58) and press [↵] to confirm.

60:00 indicates the value of 1 hour, increase or decrease as needed

10.4 SYSTEM TEST MODE

By default the system is always in TEST mode (TEST MODE displays on the screen). In this mode, the alarm relay does not enable, the siren does not sound and will be issued on the acoustic signal from the keypad. This feature can be used to test the operation of the system without enabling the siren.
To enable the siren, you need to disable the TEST mode.

Attention: The siren cycles are still counted, so if you reach the limit set (CYCLE SIREN), while removing the unit from the test, the siren will not sound until the next day (exceeding 00.00).

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select SYSTEM TEST MODE and press [↵] to confirm.
- Press 1 to configure the system in TEST MODE or [DEL] to set the value to 0 and configure the system in NORMAL mode.
- Press [↵] to confirm.

Enabling or disabling option (0 = Normal mode, 1 = TEST mode)

10.5 LOW BATTERY OFF

The system checks the charge of the battery every 2 minutes. If this parameter is enabled, IT WILL NOT BE POSSIBLE TO ARM THE SYSTEM WHEN THE BATTERY CHARGE IS LOW**.** To arm the system, you need to install a fully charged battery.

NOTE: The system checks the battery level, if present. When battery is missing this feature is not enabled.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select LOW BATTERY OFF and press [↵] to confirm.
- Press 1 to enable the feature or [DEL] to disable it.
- Press [↵] to confirm.

0 = Control Disabled, 1 = Control Enabled

10.6 AC LOSS TIME

This parameter defines the delay that must elapse before the system enables the devices that signal the absence of power (messages ID CONTACT and Vocal Messages).

Note: "0" indicates no delay, meaning that the absence of power is immediately signalled. Max value 250 minutes.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select AC LOSS TIME and press [↵] to confirm.
- Use the numerical keys to set the desired time or press [DEL] to delete an existing time.
- Press [↵] to confirm.

10.7 PULSE COUNTER

This parameter can be used to specify how many consecutive times a COUNTER zone has to be violated to activate an alarm (see also paragraph ZONES FUNCTION).

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.

- Use keys [↑] and [↓] to select PULSE COUNTER and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter the new value (adjustable up to 100) and press [↵] to confirm.

10.8 SWITCH-ALARM

This parameter can be used to adjust the sensitivity of fast contacts (zones with SWITCH-ALARM function, see also paragraph ZONES FUNCTION). The higher the value, the zone will be less sensitive.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select SWITCH ALARM and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter the new value (adjustable up to 100) and press [↵] to confirm.

10.9 SELF EXCLUSION CYCLES

Faulty zones or peripherals are automatically excluded from the system control, throughout the period in which the system is left on. At the first disarming of the plant the zone will again be included.
You can preventively set the maximum number of consecutive alarms that must occur before the self exclusion is enabled.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select SELF EXCL. CYCLES and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter the new value (adjustable up to 100) and press [↵] to confirm.

10.10 QUICK ARM (Enabling of the quick arm feature)

This feature can be used to quickly arm the system (key ✳**)** without having to enter a user code.
It can be used for one or several areas.

Note: to disarm the system you need to enter a valid user code.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select QUICK VELOCE e confermare con il tasto [↵]
- Use keys [↑] and [↓] to select the area for which you wish to work and press [↵] to confirm.
- Enter 1 to enable the quick arm feature or press [DEL] to disable it.
- Press [↵] to confirm.

Enabling or disabling option (0 = Disabled, 1 = Enabled)

Note: The partial programs that must be armed by the quick arming procedure are attributed to the user 64. By default, the user 64 is enabled to both areas and all the partial programs. Any amendments to refer to section 6.6 - USERS → PARTIAL.

10.11 QUIT TIME

The quit delay represents the time between the confirmation of the arming command (issued from the keypad, plug or a remote control) and the actual arming of the system. The default setting is prefixed to 15 seconds.
You can set a quit time for each area: (from 1 sec to 15 min)

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select QUIT TIME 01 (Area 1) or QUIT TIME (Area 2), then press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the new value desired value (from 1 sec to 15 minutes) and press [↵] to confirm.

10.12 WELCOME MESSAGE

You can change the welcome message, that is the message that displays when the system is in standby.
The maximum length of the welcome message is 32 characters (16 per line).

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select WELCOME MESSAGE and press [↵] to confirm.
- The cursor will blink on the first editable character.
- Use the alphanumerical keypad to change the character and keys [←] and [→] to move the blinking cursor to the left or right. Press [DEL] to delete a character or enter a blank space between two characters, then press [↵] to confirm.

10.13 SYSTEM OPENING ALARM and SYSTEM TAMPER

The system is protected from opening 24 hours a day by a spring contact fitted on the board. In addition, on the board there are 2 TAMPER terminals, where it's possible to connect any external tamper line. If the system is reset, this control system is automatically disabled (TAMPER IN TYPE = 4). Therefore, after completing installation, it is always advisable to rearm the protection system.
Procedure to enable and disable the system opening alarm:

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select TAMPER IN TYPE and press [↵] to confirm.
- Enter the desired value by the numeric keypad:

  0 = N.C. Normally Closed
  1 = N.A. Normally Opened
  2 = Filtered
  3 = Balanced
  4 = Disabled

10.14 ENABLING / DISABLING AREA TAMPER

It's possible to enable / disable the inputs TAMPER for a specific area.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select OTHER PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select AREA TAMPER and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired Area.
- Use the **cancel** button (X) to Enable / Disable the Tamper related to the selected area.
  □ = Tamper enabled
  • = Tamper disabled
- Press [↵] to confirm.

11. TECHNICIAN MENU

11.1 CHANGING THE TECHNICIAN MENU

You can change the technician code at any time.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select the TECHNICIAN MENU and press [↵] to confirm.
- Select TECHNICIAN CODE and press [↵] to confirm.
- Enter directly the NEW 6 digit code. Press [↵] to confirm.

ATTENTION: if you forget a TECHNICIAN code, you cannot restore it and will have to RESET the system (see paragraph RESETTING DEFAULT PARAMETERS).

11.2 RESET LOCK

This feature can be used to lock the default reset system operation.
If this feature is enabled, you will not be able to reset the system.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select the TECHNICIAN menu and press [↵] to confirm.
- Use keys [↑] and [↓] to select RESET LOCK and press [↵] to confirm.
- Enter 1 to enable the feature or 0 to disable it (to set the value to " 0 " press DEL).
- Press [↵] to confirm.

ATTENTION: if you enable this feature, you will not be able to reset the default parameters of the system if you make mistakes during programming, and will therefore have to return it to the manufacturer to be unlocked.

12. MODEM SETTINGS

The system has an integrated modem that can be used to perform the following operations:

- Program the whole system using the dedicated software
- Remotely manage the system using a PC with RS-232 port connected to the MODEM
- Send alarms and services messages using the telephone line, the voice synthesis module or **ID CONTACT** protocol
- Provide instructions using the DTMF controls of a touch tone or mobile phone (for example arm/disarm the system, enable Open Collector outputs, exclude system zones, etc.)

12.1 IDC PARAMETERS

This menu contains all the parameters related to the use of the system that can be used to send digital messages through the telephone line and **CONTACT ID** protocol**.**

12.2 RINGS NUMBER

This parameter can be used to define the number of rings that the system must wait for before answering to an incoming call on the telephone line to which it is connected. After the system has answered to the call, you will be able to check its status in real time using a touch tone telephone or change the programming parameters if you have PC with dedicated management software and a modem, which is an essential requirement to be able to perform remote management operations.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select RINGS NUMBER and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the new value (ranging from 0 to 20 rings) and press [↵] to confirm.

Note: if you enter 0, the system will not answer to any incoming call.

NOTE: during a call you can also use the features that enables you to transfer the call to the recording machine. In this case, you will have to allow the telephone to ring once, then disconnect, wait a few seconds and call once more. The system will now answer immediately without waiting for the programmed number of rings.

12.3 ATTEMPT DELAY

Time between a call and the next during the making of the cycles call. Set time up to 60" (default 15sec.).

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select ATTEMPT DELAY and press [↵] to confirm.
- Press [DEL] to delete the old setting, enter directly the new value (ranging from 1 to 60sec. Max), press [↵] to confirm.

12.4 ANSWER TIMEOUT

Maximum pending time of the system during the calls to the setted telephones. Set time up to 60" (default 45sec.).

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select ANSWER TIMEOUT and press [↵] to confirm.
- Press [DEL] to delete the old setting, enter directly the new value (ranging from 1 to 60sec. Max), press [↵] to confirm.

12.5 CALLBACK TEL.

This is one of the security levels (along with the user code and connection code) that enables the MODEM to call the remote manager back after a connection request, using the only stored number.
Therefore, to be able to use this function, you will first have to enter the number to which the PC MODEM , used for remote management, is connected, then enable the callback feature.

Note: it is also possible to enter a quick code from the Users Menu so that the system calls the remote manager modem without having to wait for the call of the remote manager.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALLBACK TEL. and press [↵] to confirm.
- Enter directly the telephone number. Use the cancel button (X) to delete numbers already entered.
- Press [↵] to confirm.

12.6 TELEMNG ID

To be able to establish a connection (via MODEM or using a serial line with COM-S interface), you need to set the system ID code for the communications between the system and PC software.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select TELEMNG ID and press [↵] to confirm.
- Directly enter the 6 digit code, using the number keys and the **cancel** button (X) to delete the numbers entered.
- Press [↵] to confirm.

Note: the code entered in this parameter must match that set in Telemng Password in the Master Data menu in the management software.
Interface COM/S is needed for the connection PC/Control Panel

12.7 LINE TEST GAP

This parameter can be used to check the presence of the telephone line to which the system is connected. The system performs this check cyclically at regular intervals, which can be set to any value ranging from 1 to 240 hours. You can also configure the system so that it performs this check only at specific hours of the day (see section LINE TEST HOUR).

Note: if the system is connected to a shared telephone line that is used by other telephones also, it advisable to disable this parameter or alternatively set to a value that ensures that the check is performed when the line is not used by the other telephones (for example during night hours, etc.).

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select LINE TEST GAP and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the desired value (from 1 to 240 hours). Enter 0 to completely disable the control.
- Press [↵] to confirm.

12.8 LINE TEST HOUR

This parameter can be used to specify at what times of the day the system must check the telephone line after waiting for the time set for parameter **LINE TEST GAP**.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select LINE TEST HOUR and press [↵] to confirm.
- Use keys [←] and [→] to browse the times one at a time or use keys [↑] and [↓] to browse them by 8 times at a time.
- After selecting the desired time, press [DEL] to enable or disable the line time at time specified.
  - □ **= Hour enabled (the test can be carried out)**
  - • **= Hour disabled (the test cannot be carried out)**
- After setting the times, press [↵] to confirm.

Note: even if the set interval (LINE TEST GAP) is not consistent with the times (LINE TEST HOUR), the system automatically calculates the first available time and then performs the check.

12.9 CALLBACK ENABLED

This parameter can be used to enable or disable the automatic callback from the system to the remote manager.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALLBACK ENABLE and press [↵] to confirm.
- Press 1 to enable the CALLBACK feature or [DEL] to disable it.
- Press [↵] to confirm.

1 = Enabled 0 = Disabled

12.10 IDC1…3 TELEPHONE

The IDC telephone is the number that the system must dial to call the unit that receives the ID CONTACT protocols.
It is possible to enter 3 numbers. The system will call in sequence the numbers from the first to the third and will download the events in the memory using the protocol to the first free number.

Note: the system calls the first number for the number of times set for the IDC ATTEMPTS parameter and moves onto the second and then third number only if receives no answer. Calls are suspended only when the system has downloaded all data to the cache, that is transferred all the stored data to one of the 3 programmed numbers.

Procedure:

Open the TECHNICIAN Menu.

- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC TELEPHONE 1..3. and press [↵] to confirm.
- Enter directly the desired number; use [DEL] to erase.

Before entering the telephone number, you can also enter special characters to enable specific options:

[↑] : displays symbol " - ", which inserts a pause before dialling the telephone number

[↓] : displays symbol " ! ", which excludes the line tone control before dialling the number

- Press [↵] to confirm.

Note: always enter telephone numbers starting from the first position.

12.11 IDC CODE

This parameter can be used to configure a system identification code so that the unit that receives the protocols is able to identify the system.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC CODE and press [↵] to confirm.
- Enter directly the desired 4-digit code; use [DEL] to erase.
- Press [↵] to confirm.

12.12 IDC ENABLING

This parameter can be used to enable the transmission of the events with digital protocol CONTACT ID.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC ENABLING and press [↵] to confirm.
- Press [↵] .
- Enter 1 to enable the system
- Press [↵] to confirm.

[DEL] : deletes the number and disables the system.

0 = Disabled 1 = Enabled

12.13 IDC ATTEMPTS

This parameter can be used to define the maximum number of attempts that the system will have to perform to establish a connection with the ID CONTACT RECEIVER when previous attempts fail.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC ATTEMPTS and press [↵] to confirm.
- Press [DEL] to delete the old setting.
- Enter directly the desired value (from 0 to 32).
- Press [↵] to confirm.

12.14 LIFE TEST GAP

This parameter can be used to set the interval of time that must elapse between two subsequent life notifications of the system. You can set a value ranging from a minimum of 1 hour to a maximum of 240 hours.
Once this parameter has been set, the system transmits the message at regular intervals.
It is also possible to define the time (or times) of the day at which the system must transmit the message (see section LIFE TEST HOUR).

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select LIFE TEST GAP and press [↵] to confirm.
- Use the numerical keys to set the desired time or press [DEL] to delete an existing time.
- Press [↵] to confirm.

Time to change, from 1 hour to 240 hours (0 = disable)

Note: this parameter can only be used to define the interval between two subsequent life notifications. This notification will however be sent only if the time brackets for transmission have been set (see the section below).

12.15 LIFE TEST HOUR

This parameter can be used to define the time (or times) at which the system must transmit the life notification after waiting for the programmed interval of time.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select LIFE TEST HOUR and press [↵] to confirm.
- Use keys [←] and [→] to browse the times one at a time or use keys [↑] and [↓] to browse them by 8 times at a time.
- After selecting the desired time, press [DEL] to include it or exclude in/from the program.
  - □ **= Time included (life test call)**
  - • **= Time excluded (no life test call)**
- After setting the times, press [↵] to confirm.

Note: even if the set interval (LIFE TEST GAP) is not consistent with the times (LIFE TEST HOUR), the system automatically calculates the first available time and then transmits the message.

12.16 ZONE RESTORING

This parameter can be used to define the zones to which the restoring message has to be sent after the occurrence of an alarm.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select ZONE RESTORING and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired zone by one position at a time or use keys [↑] and [↓] to move the blinking cursor by 8 positions at a time.
- After selecting the desired zone, press [DEL] to enable or disable the transmission of the restoring message for the selected zone.
  - □ **= Transmission of restoring message to the zone enabled**
  - • **= Transmission of restoring message to the zone disabled**
- Press [↵] to confirm.

12.17 EVENTS CODE → List in the table below

You can transmit through protocol CONTACT ID a specific list of events. You can assign to any of the events shown in the table a different CONTACT ID as compared to the default one; for example for event “24 HOUR NON-BURGLARY” = 150, you can choose to transmit code 100 (Medical). The following table lists all the events that can be transmitted through protocol CONTACT ID along with the default code.

EVENT CODE	EVENT
110	Fire alarm
121	Duress
122	Silent duress
130	Zone alarm
137	Zone tamper
341	Peripher. tamper
150	24 hours non-burglary
301	AC loss
309	Low battery
383	Radio device tamper
384	Radio device low battery
381	Radio device no supervision
344	Radio interference
305	System reset
351	Telco line fault

401	On/Off by user
402	Group On/Off
403	Automatic On/Off
407	Remote On/Off
570	Zone bypass
461	Wrong code
602	Periodic test
627	Programmation mode entry

Note: by default, all the events listed in the table are enabled. To disable the transmission of a specific event, enter 0 instead of the default event code.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select MODEM and press [↵] to confirm.
- Use keys [↑] and [↓] to select IDC PARAMETERS and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired event and press [↵] to confirm.
- Use the numerical keys to set the code for the selected event or press [DEL] to delete the existing setting.
- Press [↵] to confirm.

13. DIALER

As explained in the previous chapter, the system has a built-in telephone modem designed to transmit digital information (ID Contact) and voice messages. If you install the optional SV/S card, you can also use the telephone modem as dialer and benefit from the following features:

- 200 short voice pre-recorded messages for events, each 5 seconds long (for example a zone alarm), which can be changed by the installer through the TECHNICIAN Menu
- 2 queue messages, one per area, which can also be changed and used to identify the system (for example enabling xxyy of Mr. yyzz, etc.), each with a maximum length of 20 seconds
- 16 telephone numbers that can be freely assigned to every event
- 30 different events that can be assigned to voice messages
- Call attempts that can be set for each telephone number within a range from 1 to 10

13.1 MAX ATTEMPTS

This parameter can be used to define the maximum number of attempts that the system must use when calling a telephone that cannot be reached (for example a telephone that is busy or not answering).

NOTE: if you leave the parameter set to 0, the dialer doesn't make any calls.

NOTE: to signal to the system that the call has been successful, you need to press [#] and wait for the high-pitched confirmation tone, otherwise the system will continue to call for the number of times set for the maximum attempts.

PLEASE NOTE: the called user can suspend all subsequent calls. For more information, see section DTMF COMMANDS.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALL OPTIONS and press [↵] to confirm.
- Use keys [↑] and [↓] to select MAX ATTEMPTS and press [↵] to confirm.
- Press [DEL] several times to delete the old setting.
- Enter directly the new desired value (from 1 to 10).

13.2 REPEAT TIMES

This parameter indicates the number of repetitions of the vocal message, once you get a phone programmed.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.

- Use keys [↑] and [↓] to select CALL OPTIONS and press [↵] to confirm.
- Use keys [↑] and [↓] to select REPEAT TIMES and press [↵] to confirm.
- Press [DEL] several times to delete the old setting.
- Enter directly the new desired value (from 1 to 10).

13.3 CALL DELAY

This parameter can be used to define the interval of time that must elapse between the occurrence of an event and the call. It can be set to any value ranging from 0 sec. (immediate call) to 240 sec.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALL OPTIONS and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALL DELAY and press [↵] to confirm.
- Press [DEL] several times to delete the old setting.
- Enter directly the new desired value (from 0 to 240 sec).

13.4 VOICE PRIORITY

This parameter can be used to determine whether to give priority to calls for the transmission of the CONTACT ID digital protocols or to programmed vocal calls.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALL OPTIONS and press [↵] to confirm.
- Use keys [↑] and [↓] to select VOICE PRIORITY and press [↵] to confirm.
- Press [1] to enable the CALLBACK feature or [DEL] to disable it.
- Press [↵] to confirm.

0 = Priority to CONTACT ID 1= Priority to VOCAL MESSAGES

13.5 EVENT → VOCAL BOX (assignment of events to vocal boxes)

To be sure that the system makes the call, you need to assign an event to a recordable vocal box. When the specified event occurs, the system will make the call and play the recorded message. You can choose 30 different events: alarm, technical events, etc., and assign them to a maximum number of 200 vocal boxes. The section that follows provides the complete list of events and default pre-recorded vocal boxes assigned to them. Default settings can however be changed to suit specific needs.

Note: you can assign several events to one vocal box.

Available events:

1	AC Loss	**13**	Tel. Connection	**25**	Key arming
2	AC Return	**14**	Zone fault	**26**	Events memory full
3	Low battery	**15**	Periph. Tamper	**27**	Life test warning
4	Zone alarm	**16**	System tamper	**28**	Program ON
5	Zone tamper	**17**	Telco line fault	**29**	Program OFF
6	Users login	**18**	Communication fault	**30**	Timer event
7	Technician login	**19**	DTMF login	**31**	Radio D. Tamper
8	Arming	**20**	Duress	**32**	Radio D. Low Battery
9	Disarming	**21**	Tecnolog. Zone	**33**	Radio D. Battery OK
10	Arming by Zone	**22**	Fire alarm	**34**	Supervision Failure
11	User entry	**23**	Tamper fault	**35**	Supervision OK
12	User exit	**24**	DTMF arming	**36**	Strong radio noise
37	No GSM	**38-85**	Zone 1 to 48	**86-91**	Output 1 to 6
92-99	Partial Area 1	**100-108**	Partial Area 2		

Additional events available:

– Zone opening

– Output enabling
– Enabling/disabling of a program

Note: this list refers to pre-recorded vocal boxes. Remember that you can change any vocal box in order to customize the message and assign all events to any of the 200 available vocal boxes.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select EVENT → VOCAL BOX and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired event and press [↵] to confirm.
- Enter the number that corresponds to the vocal box to which it is assigned (from 1 to 200) and press [↵] to confirm.

13.6 EVENT → TELEPHONE

You can select the telephone number to which the notification of one of the available events has to be sent. This could be useful if a specific user does not need to be informed of specific events, which represent however essential information for other users. Numbers can be freely assigned to events by following the procedure described below.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select EVENT→TELEPHONE and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired event and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired telephone number. The positions correspond to the 16 available telephone numbers.
- Press [DEL] to assign or delete the assignment of the selected telephone number:

  □ = Telephone number assigned
  • = Telephone number not assigned

- After completing the operation, press [↵].
- Repeat the procedure for all the desired telephone numbers and events.

13.7 PHONE BOOK

The dialer is able to manage a maximum of 16 telephone numbers. Each number may have a maximum length of 16 digits. Numbers are dialled directly by the system by producing a series of DTMF tones (NO pulses).

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select PHONE BOOK and press [↵] to confirm.
- Use keys [↑] and [↓] to select the desired telephone number and press [↵] to confirm.
- Enter directly the desired telephone number using the numerical keys and press [↵] to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the desired telephone number.
- Press [DEL] to delete an existing number.
- Repeat the procedure for all the telephone numbers you wish to call.

Note: you can use the arrow keys to enter symbols along with the telephone numbers in order to be able to use additional features during the calls:

- **- = inserts a pause during dialling (you can insert it in any position)**
- **! = does not check the telephone line. If this symbol is entered before the telephone number, the system dials the number without checking that the line tone is available; if this symbol is entered after the telephone number, the system does not check if the called number has replied and plays the vocal message after approximately 5/7 seconds. The symbol can be inserted in both positions within the same telephone number.**

13.8 AREA TELEPHONES

For each of the 16 stored numbers, you can specify the area for which the notifications related to the selected events have to be transmitted. This ensures that a specific user only receives the warnings related to events of his area o all the system events, that is also events to the areas to which it does not have access. This may apply, for example, to a warden or to a surveillance company.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select AREA TELEPHONES and press [↵] to confirm.
- Use keys [↑] and [↓] to select the AREA you wish to assign to the telephones and press [↵] to confirm.
- Use keys [←] and [→] to select the desired telephone number and with the cancel button (X) enable or disable the phone number to the receipt of the notification voice for selected events.
- Press [↵] to confirm.
- Repeat the operation for the remaining users and press [↵] to confirm.
  □ = Telephone linked to the area
  • = Telephone DOESN'T linked to the area

13.9 GSM MANAGEMENT

With this menu is possible to set/define the following:
- Priority of usage during a call of PSTN line or GSM.
- Sms sending for events configured (same events of vocal calls).
- Number and text for the SMS to send to the provider for SIM Credit Info.

Setting: 0 → only PSTN line 1 → PSTN with GSM backup 2→ GSM with PSTN backup.

It's possible define to which phone numbers send the SMS of the configured events. Set □ for the interested phone numbers.

For the credit management, set:
- SMS text of request;
- Provider phone number.

Also from User menu it's possible to request and verify the information about credit.

NOTE: by pressing the X key it's possible to view on display the GSM signal (from1 to 4). Attention: if there are 4 small squares there isn't GSM signal.

13.10 MENU ACCESS RESTRICTIONS

You can decide which phone numbers are allowed access to the Voice Guidance menu. If in this parameter is not selected any number, the access to this menu will allow any number, otherwise access will be granted only to selected phone numbers. It's in any case clear that to enter the menu on the Voice Guidance, you must have a valid user code. The association of the numbers is free and is described below how to achieve it.

Procedure:
- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select MENU ACCESS TEL. and press [↵] to confirm.
- Use keys [←] and [→] to select the desired telephone number and press [↵] to confirm.
- Press the cancel (X) to associate or not the phone number in question:
  □ = User allowed access to the Menu
  • = Users do not permit access to the Menu
- Press [↵] to confirm.

13.11 AUTOMATIC CALL QUEUE RESET (CLEAR CACHE Tel.)

You can decide which phone numbers are allowed to cancel the call queue, following the response to an incoming call the station.

CAUTION: It's always best to use this option in combination with CONFIRM NEED TEL. that will be described in next section.
The association of numbers to the event is free, and is described below how to achieve it.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select CLEAR CACHE TEL. and press [↵] to confirm.
- Use keys [←] and [→] to select the desired telephone number and press [↵] to confirm.
- Press the cancel (X) to associate or not the phone number in question:
  - □ = Reset Queue Calls Allowed
  - • = Reset Queue Calls NOT Allowed
- Press [↵] to confirm.

13.12 REQUEST FOR CONFIRMATION OF RESPONSE

You can decide from which phone numbers should be necessary to receive a confirmation of response to the call of notification of an event. This must be done by pressing [#] on the phone where the call is received. Upon receipt of this confirmation the number in question will no longer be contacted for this event. The association of numbers to the event is free, and is described below how to achieve it.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select CONFIRM NEED TEL. and press [↵] to confirm.
- Use keys [←] and [→] to select the desired telephone number and press [↵] to confirm.
- Press the cancel (X) to associate or not the phone number in question:
  - □ = Answer Confirmation Needed
  - • = Answer Confirmation NOT Needed
- Press [↵] to confirm.

13.13 CALL QUEUE RESET CODE

You can define a CALL QUEUE RESET CODE that will be used as call queue reset command.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select CALL RESET CODE and press [↵] to confirm.
- Press [CANC] to delete the current call reset code (default: 123456).
- Insert the new reset code and press [↵] to confirm.

13.14 RECORDING / PLAYING A MESSAGE

Messages are recorded on-site at a distance of 10 cm from the SV/S module inserted in the system card. Recording must be first enabled on the keypad and then launched directly from the module by pressing the corresponding key.
The flashing red LED on the SV/S module indicates that the card is waiting for the recording. When you press the key on the card, the LED switches on permanently to indicate that the system is recording. The LED switches off at the end of the recording time.

Procedure:

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select DIALER and press [↵] to confirm.
- Use keys [↑] and [↓] to select VOCAL MESSAGES and press [↵] to confirm.
- Use keys [↑] and [↓] to select one of the following options:
  - SYSTEM MESSAGES (1 or 2) and press [↵] to confirm.
  - AREA MESSAGES (1 or 2) and press [↵] to confirm.
  - EVENTS MESSAGES (from 1 to 200) and press [↵] to confirm.
- Press [↵] to confirm
- Enter the number of box to Record / Repeat, and press Enter [↵] to listen to message.
- To register press **star** [*] . Approach to the module while the red light flashes.
- Press and hold the key down to start the recording (the red LED switches on permanently). As soon as you release the key, the recording is interrupted.

Note: please remember that the maximum duration of each event message (msg. 1 … msg. 200) is 8 sec.

SYSTEM messages - Vocal messages that precede the event message when an alarm occurs
AREA messages - They can be used to customize the area name used in the voice guided menu
EVENTS messages - They can be freely assigned to any event

14. ARMING THE SYSTEM

It is possible to use 2 different arming modes for each area:

- **MANUAL** = In this mode you can select the area and the program you wish to arm.
- **AUTOMATIC** =The system automatically arms and disarms depending on the times set on the TIMER.

The MANUAL arming operations can be performed using:

- The keypads
- The plugs
- The zones configured with ON/OFF functions (one program per zone only)

It's possible to arm/disarm the system by sending a SMS. It's possible to define which program for area arm or disarm. The syntax of SMS must be the following:

UPWD:aaaaaa ARM.X=12345678, where "aaaaaa" is the password (default:654321); X is the area on which it's possible to act; 12345678 is the list of programs to arm (it's possible to define 1 or more programs).To disarm the system, the syntax is DISARM.X instead of ARM.X.

- By sending a SMS it's possible to change the password with the following sintax: UPWD:oooooo UPWD:nnnnnn, where "oooooo" is the old password and "nnnnnn" is the new one.

14.1 ARMING THE SYSTEM WITH THE KEYPAD

- Type the USER code for the area (for example 111111) and press [↵] to confirm.
- Select ARMING and press [↵] to confirm.
- Use the numerical keys (from 1 to 8) to select the programs you wish to include or exclude for the arming.
- Press [↵] to confirm (or press cancel to go back).
- The system starts to count the output time and then arms.
- The yellow LED flashes during the output time and turns on permanently once the system is armed.

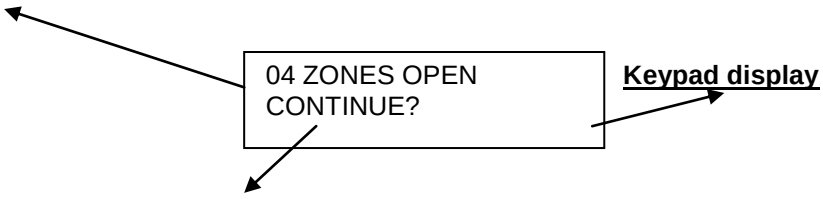
1	**PROGRAM 1**
2	**PROGRAM 2**
3	**PROGRAM 3**
4	**PROGRAM 4**
5	**PROGRAM 5**
6	**PROGRAM 6**
7	**PROGRAM 7**
8	**PROGRAM 8**

Note: if there are keypads assigned to several areas, press [↵] to select the area in which you wish to perform the arming. The operating area is displayed in the lower left of the display.

14.2 ARMING THE SYSTEM WITH EXCLUDED ZONES

When you arm the system with open zones, the system displays a message prompting the user to confirm before continuing:

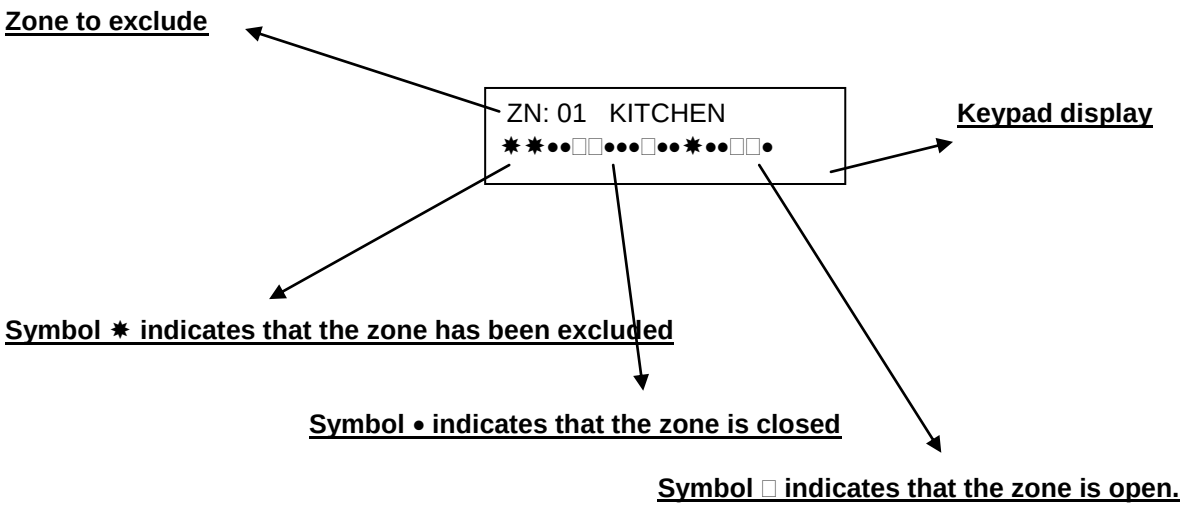
This message specifies how many zones are open



Press one of the following keys to continue.

At this point you have three options, depending on the key you press:

#	= Cancels the arming operation (and returns to the Users Menu)
↵	= Continues the arming operation (all the opened zones will have to be closed before the quit time expires, otherwise the system issues an alarm).
✸	= The open zones are excluded from the arming operation.
CANC	= can be excluded from the current arming the desired input (see below).


Zone to exclude
ZN: 01 KITCHEN
✸✸••□□•••□••✸••□□•
Keypad display
Symbol ✸ indicates that the zone has been excluded
Symbol • indicates that the zone is closed
Symbol □ indicates that the zone is open.

Use keys [*] and [#] to move the flashing cursor to the position that corresponds to the desired zone.

Press [DEL] to excluded or include the desired zones.

Press ↵ to confirm the selection or [0] to exit from the menu.

Note: the green control LED will not turn on for the excluded zones.

14.3 QUICK ARMING

You can select from the Technician Menu an option that enables you to quickly arm the system without using the user code (in arming mode ONLY).

Note: by default, when this feature is enabled for the selected area, al the programs available for the area are enabled. To change the programs to arm using the Quick arm feature, you need to change the settings of parameter Users → Programs for User 64.
Remember to enable quick arming for the desired area (OTHER PARAMETERS □ QUICK ARM).

Procedure:

Press [✸] and select the partial that you want using the numeric keypad.

- Press ↵ to confirm.

NOTE: if you select this operation, you will have to enter a valid user code in order to disarm the system.

14.4 ARMING THE SYSTEM WITH AN ELECTRONIC KEY

The system can also be armed and disarmed using programmed keys.

Procedure:

- Insert or move the key close to a plug enabled to manage the area for which the key is valid.
- Wait for the LED of the program you wish to arm to turn on, then extract the key.

Note: each plug can be used for one area only and can manage up to 3 programs per area. The output time counter starts as soon as you extract the key. This condition is signalled by the flashing of the LED that corresponds to the selected arming operation and by a series of BEEPS issued by the keypads and plugs (if the sound option is enabled).

14.5 MEANING OF THE READER LEDS

- **System DISARMED = The green control LED turns on (if all the zones are idle)**
- **System armed = The yellow and green LEDs turn on**
- **System in alarm = All the LEDs flash**
- **During the quit time = Yellow LED flashes (Green turn on if all zones are idel)**
- **During the key programming = All the LEDs quickly turn on in sequence**

Note: if you arming the system with a key and one or more zones are open, the system arms and after the quit time the system will go into alarm, unless you program the automatic exclusion of the zone(s) or you disable the arming with key when open zones are present (see the relevant paragraphs of Chapter INPUTS MENU).

14.6 ARMING THE SYSTEM WITH AN ON/OFF INPUT

Once assigned to the desired input the function 8 (ON / OFF system), you must associate the program you want to insert. Each **command pulse** applied at the input, will result in the arming and disarming the system.

- Open the TECHNICIAN Menu.
- Use keys [↑] and [↓] to select ZONES MENU and press ↵ to confirm.
- Use keys [↑] and [↓] to select ARMING BY ZONES and press ↵ to confirm.
- Use keys [←] and [→] to move the blinking cursor to the position that corresponds to the zone you wish to change.
- Enter a number from 0 to 8 to assign a PROGRAM to the zone.
- Press ↵ to confirm.

Note: you can connect this input to any control device (remote control, mechanical key, etc.) and select any operating logic (N.C. or N.O.).

15. MANAGE EVENTS

15.1 READING EVENTS

When a new event occurs the panel will report it with the red LED lights on the keyboard (and on the plugs). The red " events memory " led will switch off when **the system will armed , or if you enter the menu READ EVENTS.**

The control unit has a memory of dynamic events (that are automatically allocated to the different areas).
When the event memory is full, the system displays a message on the keypad display. At this point you have two options:

- You can save all the events on the PC in several formats.
- You can allow the new events to be overwritten on the new ones.

Here how to read the EVENTS.

Procedure:
Open the menu (Technician or Users).
- Use keys [↑] and [↓] to select MANAGE EVENTS and press ↵ to confirm.
- Use keys [↑] and [↓] to select READ EVENTS and press ↵ to confirm.
- Press [↑] and [↓] to browse the list of events.
- Press ↵ to cancel the events reading operation.

15.2 EVENTS OPTIONS

You can configure the system so that some notifications are not displayed and not signalled with the red LED on the keypad or plugs.

Procedure:
Open the menu (Technician or Users).
- Use keys [↑] and [↓] to select MANAGE EVENTS and press ↵ to confirm.
- Use keys [↑] and [↓] to select EVENTS OPTIONS and press ↵ to confirm.
- Use keys [↑] and [↓] to select the desired notification and press ↵ to confirm.
- Use keys [←] and [→] to move the blinking cursor (R=Red LED, D=Display).

- Press [DEL] to enable/disable the selected notification

  (□ = Notification enabled • = Notification disabled)

- Press ↵ to confirm.
- Press [#] to return to the main menu.

16. CONTROLLING THE SYSTEM REMOTELY FROM A TOUCH TONE PHONE

If you have an (optional) voice synthesis SV/S module, you can remotely control the system by calling the number of the line to which the system is connected from a touch tone phone and following the vocal instructions.

You can perform the following operations:

- Arm and disarm one or more area programs
- Enable and disable the Open Collector outputs
- Exclude zones with faults
- Check the system status in real time

To perform all the operations described above, you will have to press [#] and then enter your user code followed by [#] at the beginning of the call.

Note: you can work ONLY on the areas and zones that you are enabled to use.

The following is a block diagram of the Voice Menu Guide.

17. PROGRAMMING KEYS

Keys (model INS/EP or Beatle) can be programmed ONLY by users who have a user name. These users can create an unlimited number of keys in order to operate the system within the limits permitted to them.
The installer must instead determine, during the programming phase, the plug that users may use to program their keys. For more information, see paragraph CONFIGURING PLUGS.

Procedure:

- Open the USERS Menu by typing directly the user code and confirming it with key [↵].
- Press [↓] to select PROGRAMMING PLUG, Press ↵ to confirm.
- Press [*] to confirm, [#] to cancel the operation.
- After you confirm the operation on the programming plug, the LEDs start to flash quickly to indicate that the plug is ready to receive a key to program.
- Insert a key into the plug and wait for the LEDs to stop flashing. Then, extract the programmed key.
- Repeat this procedure to program additional keys.

Note: Remember to set, for each specific area, the plug that is SETTED for the programming of keys (menu PERIPHERALS – PLUGS → PROGRAMS).

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All our products are compliant with the requirements of standard CEI 79-2, second release. 1993.
The installation must be performed in a workmanlike manner by qualified personnel.
AMC Elettronica S.r.l. shall not be responsible for damages originating from the tampering of the product by unauthorized people.
It is advisable to check the correct operation of the alarm system at least once a month. It is also important to remember that a reliable electronic alarm system can only limit the risk of intrusions, thefts, fires or similar events, but not eliminate them.
If you find inconsistencies in the manual, immediately contact the Technical Assistance of AMC Elettronica S.r.l.